









## ChIPmentation kit for histones

**C01011010**

**Flyleaf**

Date of compilation: 2020-07-28

### Bill of materials


Name of substance	Identifier	Number of pieces	Classification acc. to GHS	Pictograms	Page
Glycine		1			3 – 10
Shearing Buffer iS1		1			11 – 18
DiaMag protein A-coated magnetic beads		1			19 – 26
wash buffer iW1		1	Eye Irrit. 2 / H319 Aquatic Chronic 3 / H412		27 – 36
Wash buffer iW2		1	Eye Irrit. 2 / H319 Aquatic Chronic 3 / H412		37 – 45
Wash buffer iW3		1			46 – 54
ChIP-seq grade water		1			55 – 62
lysis buffer iL1		1	Aquatic Chronic 3 / H412		63 – 71
Lysis Buffer iL2		1			72 – 79
5x ChIP Buffer iC1		1	Eye Dam. 1 / H318 Aquatic Chronic 2 / H411	 	80 – 90
Tagmentation buffer		1	Flam. Liq. 3 / H226 Eye Irrit. 2 / H319 Repr. 1B / H360D	  	91 – 102
wash buffer tagW1		1			103 – 110
Wash Buffer tagW2		1	Eye Irrit. 2 / H319 Aquatic Chronic 3 / H412		111 – 119
Stripping Reagent		1			120 – 127
MgCl2		1			128 – 135
resuspension buffer		1			136 – 143
Protease Inhibitor Mix		1			144 – 152
5% BSA		1			153 – 160

## ChIPmentation kit for histones

**C01011010**

**Flyleaf**

Date of compilation: 2020-07-28

Name of substance	Identifier	Number of pieces	Classification acc. to GHS	Pictograms	Page
rabbit IgG		1			161 – 169
H3K4me3 polyclonal antibody		1	Skin Sens. 1 / H317		170 – 179
ChIP-seq grade GAPDH TSS primer pair		1			180 – 187
ChIP-seq grade Myoglobin exon 2 primer pair		1			188 – 195
Tagmentation enzyme		1			196 – 203
2x High-Fidelity Master-mix		1			204 – 211
100x SYBR		1			212 – 219
universal primer		1			220 – 227
Primer index 1-24		1			228 – 235

## Glycine

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

**Glycine**

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

#### 2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

## Glycine

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

##### general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

##### following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

##### following skin contact

wash with plenty of soap and water.

##### following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

##### following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

##### suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

##### unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

##### hazardous combustion products

nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

##### for non-emergency personnel

remove persons to safety.

##### for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

## Glycine

version number: GHS 1.0

date of compilation: 2019-12-02

### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

### 7.3 specific end use(s)

see section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 control parameters

this information is not available.

### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

## Glycine

version number: GHS 1.0

date of compilation: 2019-12-02

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/ impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined

partition coefficient

- n-octanol/water (log KOW)	this information is not available
-----------------------------	-----------------------------------

## Glycine

version number: GHS 1.0

date of compilation: 2019-12-02

	auto-ignition temperature	not determined
	viscosity	not determined
	explosive properties	none
	oxidising properties	none
9.2	<b>other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

oxidisers

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### **classification according to GHS (1272/2008/EC, CLP)**

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

## Glycine

version number: GHS 1.0

date of compilation: 2019-12-02

- carcinogenicity  
shall not be classified as carcinogenic.
- reproductive toxicity  
shall not be classified as a reproductive toxicant.
- specific target organ toxicity - single exposure  
shall not be classified as a specific target organ toxicant (single exposure).
- specific target organ toxicity - repeated exposure  
shall not be classified as a specific target organ toxicant (repeated exposure).
- aspiration hazard  
shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

- 12.1 toxicity**  
shall not be classified as hazardous to the aquatic environment.
- 12.2 persistence and degradability**  
data are not available.
- 12.3 bioaccumulative potential**  
data are not available.
- 12.4 mobility in soil**  
data are not available.
- 12.5 results of PBT and vPvB assessment**  
data are not available.
- 12.6 other adverse effects**  
data are not available.

### SECTION 13: Disposal considerations

- 13.1 waste treatment methods**
  - sewage disposal-relevant information  
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.
  - waste treatment of containers/packagings  
completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.
- remarks**  
please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.



## Glycine

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 14: Transport information

- 14.1 UN number** not subject to transport regulations
- 14.2 UN proper shipping name** not relevant
- 14.3 transport hazard class(es)** none
- 14.4 packing group** not assigned to a packing group
- 14.5 environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 special precautions for user**  
there is no additional information.
- 14.7 transport in bulk according to Annex II of MARPOL and the IBC Code**  
the cargo is not intended to be carried in bulk.

#### Information for each of the UN Model Regulations

##### transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

not subject to ADR, RID and ADN.

##### International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

##### International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 Chemical Safety Assessment**  
chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code

## Glycine

version number: GHS 1.0

date of compilation: 2019-12-02

abbr.	descriptions of used abbreviations
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## Shearing Buffer iS1

version number: GHS 1.1

date of compilation: 2020-01-23

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

**Shearing Buffer iS1**

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

#### 2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This mixture does not contain any potentially hazardous products.

## Shearing Buffer iS1

version number: GHS 1.1

date of compilation: 2020-01-23

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

##### general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

##### following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

##### following skin contact

wash with plenty of soap and water.

##### following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

##### following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

##### suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

##### unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

##### hazardous combustion products

nitrogen oxides (NO<sub>x</sub>)

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

##### for non-emergency personnel

remove persons to safety.

##### for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

## Shearing Buffer iS1

version number: GHS 1.1

date of compilation: 2020-01-23

### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

### 7.3 specific end use(s)

see section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 control parameters

this information is not available.

### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

## Shearing Buffer iS1

version number: GHS 1.1

date of compilation: 2020-01-23

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/ impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined

partition coefficient

- n-octanol/water (log KOW)	this information is not available
-----------------------------	-----------------------------------

## Shearing Buffer iS1

version number: GHS 1.1

date of compilation: 2020-01-23

auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
<b>9.2 other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

##### classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### classification according to GHS (1272/2008/EC, CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

##### acute toxicity

shall not be classified as acutely toxic.

##### skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

##### serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

##### respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

##### germ cell mutagenicity

shall not be classified as germ cell mutagenic.

## Shearing Buffer iS1

version number: GHS 1.1

date of compilation: 2020-01-23

**carcinogenicity**

shall not be classified as carcinogenic.

**reproductive toxicity**

shall not be classified as a reproductive toxicant.

**specific target organ toxicity - single exposure**

shall not be classified as a specific target organ toxicant (single exposure).

**specific target organ toxicity - repeated exposure**

shall not be classified as a specific target organ toxicant (repeated exposure).

**aspiration hazard**

shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

**12.1 toxicity**

shall not be classified as hazardous to the aquatic environment.

**12.2 persistence and degradability**

data are not available.

**12.3 bioaccumulative potential**

data are not available.

**12.4 mobility in soil**

data are not available.

**12.5 results of PBT and vPvB assessment**

data are not available.

**12.6 other adverse effects**

data are not available.

### SECTION 13: Disposal considerations

**13.1 waste treatment methods**

**sewage disposal-relevant information**

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

**waste treatment of containers/packagings**

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

**remarks**

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.



## Shearing Buffer iS1

version number: GHS 1.1

date of compilation: 2020-01-23

### SECTION 14: Transport information

- 14.1 UN number** not subject to transport regulations
- 14.2 UN proper shipping name** not relevant
- 14.3 transport hazard class(es)** none
- 14.4 packing group** not assigned to a packing group
- 14.5 environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 special precautions for user**  
there is no additional information.
- 14.7 transport in bulk according to Annex II of MARPOL and the IBC Code**  
the cargo is not intended to be carried in bulk.

#### Information for each of the UN Model Regulations

##### transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

not subject to ADR, RID and ADN.

##### International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

##### International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 Chemical Safety Assessment**  
chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code

## Shearing Buffer iS1

version number: GHS 1.1

date of compilation: 2020-01-23

abbr.	descriptions of used abbreviations
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## DiaMag protein A-coated magnetic beads

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name	<b>DiaMag protein A-coated magnetic beads</b>
registration number (REACH)	not relevant (mixture)
product code(s)	C03010020

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses	for research use only, not for use in diagnostic or therapeutic procedures.
--------------------------	---

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service	+32 4 364 20 50 this number is only available during the following of- fice hours: Mon-Fri 09:00 AM - 05:00 PM
-------------------------------	--

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)  
this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)  
not required

#### 2.3 other hazards

results of PBT and vPvB assessment  
this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## DiaMag protein A-coated magnetic beads

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO<sub>x</sub>)

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

## DiaMag protein A-coated magnetic beads

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

#### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

#### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

## DiaMag protein A-coated magnetic beads

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid (suspension)
colour	brown
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined

## DiaMag protein A-coated magnetic beads

version number: GHS 1.0

date of compilation: 2019-12-02

vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined
partition coefficient	
- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
<b>9.2 other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

##### classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### classification according to GHS (1272/2008/EC, CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

## DiaMag protein A-coated magnetic beads

version number: GHS 1.0

date of compilation: 2019-12-02

- acute toxicity
  - shall not be classified as acutely toxic.
- skin corrosion/irritation
  - shall not be classified as corrosive/irritant to skin.
- serious eye damage/eye irritation
  - shall not be classified as seriously damaging to the eye or eye irritant.
- respiratory or skin sensitisation
  - shall not be classified as a respiratory or skin sensitiser.
- germ cell mutagenicity
  - shall not be classified as germ cell mutagenic.
- carcinogenicity
  - shall not be classified as carcinogenic.
- reproductive toxicity
  - shall not be classified as a reproductive toxicant.
- specific target organ toxicity - single exposure
  - shall not be classified as a specific target organ toxicant (single exposure).
- specific target organ toxicity - repeated exposure
  - shall not be classified as a specific target organ toxicant (repeated exposure).
- aspiration hazard
  - shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

- 12.1 toxicity**
  - shall not be classified as hazardous to the aquatic environment.
- 12.2 persistence and degradability**
  - data are not available.
- 12.3 bioaccumulative potential**
  - data are not available.
- 12.4 mobility in soil**
  - data are not available.
- 12.5 results of PBT and vPvB assessment**
  - data are not available.
- 12.6 other adverse effects**
  - data are not available.



## DiaMag protein A-coated magnetic beads

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 13: Disposal considerations

#### 13.1 waste treatment methods

waste treatment-relevant information

recycling/reclamation of other inorganic materials.

sewage disposal-relevant information

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packages

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

#### remarks

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

- |  |   |
|--|---|
| <b>14.1 UN number</b>  | not subject to transport regulations                                  |
| <b>14.2 UN proper shipping name</b>  | not relevant  |
| <b>14.3 transport hazard class(es)</b>   | none  |
| <b>14.4 packing group</b>  | not assigned to a packing group                                       |
| <b>14.5 environmental hazards</b>  | non-environmentally hazardous acc. to the dangerous goods regulations |
| <b>14.6 special precautions for user</b>                                       | there is no additional information.                                   |
| <b>14.7 transport in bulk according to Annex II of MARPOL and the IBC Code</b> | the cargo is not intended to be carried in bulk.                      |

#### Information for each of the UN Model Regulations

##### **transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

not subject to ADR, RID and ADN.

##### **International Maritime Dangerous Goods Code (IMDG)**

not subject to IMDG.

##### **International Civil Aviation Organization (ICAO-IATA/DGR)**

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 Chemical Safety Assessment**  
chemical safety assessments for substances in this mixture were not carried out.

## DiaMag protein A-coated magnetic beads

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

#### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## wash buffer iW1

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-02

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name **wash buffer iW1**  
registration number (REACH) not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service +32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

section	hazard class	category	hazard class and category	hazard state-ment
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319
4.1C	hazardous to the aquatic environment - chronic hazard	3	Aquatic Chronic 3	H412

for full text of abbreviations: see SECTION 16.

the most important adverse physicochemical, human health and environmental effects  
spillage and fire water can cause pollution of watercourses.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

- signal word warning

- pictograms

GHS07



## wash buffer iW1

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-02

### - hazard statements

H319 causes serious eye irritation.  
H412 harmful to aquatic life with long lasting effects.

### - precautionary statements

P273 avoid release to the environment.  
P280 wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 if eye irritation persists: Get medical advice/attention.  
P501 dispose of contents/container to industrial combustion plant.

## 2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.


## SECTION 3: Composition/information on ingredients

### 3.1 substances

not relevant (mixture)

### 3.2 mixtures

description of the mixture

name of substance	identifier	wt%	classification acc. to GHS	pictograms
Triton X-100	CAS No 9002-93-1  EC No 618-344-0	≤ 2	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	

for full text of abbreviations: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

## wash buffer iW1

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-02

### 4.3 indication of any immediate medical attention and special treatment needed

none

## SECTION 5: Firefighting measures

### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

### 5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO<sub>x</sub>)

### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

## SECTION 6: Accidental release measures

### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## wash buffer iW1

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-02

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation  
use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

#### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as  
frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls  
general ventilation.

individual protection measures (personal protective equipment)

eye/face protection  
wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

## wash buffer iW1

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-02

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	1 g/cm <sup>3</sup> at 20 °C
vapour density	this information is not available
solubility(ies)	not determined

##### partition coefficient

- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none

#### 9.2 other information

there is no additional information

## wash buffer iW1

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-02

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

see below "Conditions to avoid".

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### classification according to GHS (1272/2008/EC, CLP)

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

causes serious eye irritation.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

shall not be classified as a specific target organ toxicant (single exposure).

specific target organ toxicity - repeated exposure

shall not be classified as a specific target organ toxicant (repeated exposure).



## wash buffer iW1

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-02

aspiration hazard  
shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

- 12.1 toxicity**  
harmful to aquatic life with long lasting effects.
- 12.2 persistence and degradability**  
data are not available.
- 12.3 bioaccumulative potential**  
data are not available.
- 12.4 mobility in soil**  
data are not available.
- 12.5 results of PBT and vPvB assessment**  
data are not available.
- 12.6 other adverse effects**  
data are not available.

### SECTION 13: Disposal considerations

- 13.1 waste treatment methods**  
sewage disposal-relevant information  
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.  
waste treatment of containers/packageings  
completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.
- remarks**  
please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

- |  |   |
|--|---|
| <b>14.1 UN number</b>  | not subject to transport regulations                                  |
| <b>14.2 UN proper shipping name</b>  | not relevant  |
| <b>14.3 transport hazard class(es)</b>   | not assigned  |
| <b>14.4 packing group</b>  | not assigned  |
| <b>14.5 environmental hazards</b>  | non-environmentally hazardous acc. to the dangerous goods regulations |
| <b>14.6 special precautions for user</b>                                       | there is no additional information.                                   |
| <b>14.7 transport in bulk according to Annex II of MARPOL and the IBC Code</b> | the cargo is not intended to be carried in bulk.                      |

## wash buffer iW1

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-02

### Information for each of the UN Model Regulations

#### **transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

not subject to ADR. not subject to RID.

#### **European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)**

identifier number 9006  
proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
class 9  
number of cones/blue lights 0

#### **International Maritime Dangerous Goods Code (IMDG)**

not subject to IMDG.

#### **International Civil Aviation Organization (ICAO-IATA/DGR)**

not subject to ICAO-IATA.

### **SECTION 15: Regulatory information**

#### **15.1 safety, health and environmental regulations/legislation specific for the substance or mixture**

#### **15.2 Chemical Safety Assessment**

chemical safety assessments for substances in this mixture were not carried out.

### **SECTION 16: Other information**

#### **indication of changes (revised safety data sheet)**

section	former entry (text/value)	actual entry (text/value)	safety-relevant
1.1	alternative name(s): tagW2		yes
3.2	mixtures	mixtures: description of the mixture	yes

#### **abbreviations and acronyms**

abbr.	descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)

## wash buffer iW1

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-02

abbr.	descriptions of used abbreviations
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
vPvB	Very Persistent and very Bioaccumulative

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### list of relevant phrases (code and full text as stated in chapter 2 and 3)

code	text
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

## **wash buffer iW1**

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-02

---

### **disclaimer**

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

**Wash buffer iW2**

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

section	hazard class	category	hazard class and cat- egory	hazard state- ment
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319
4.1C	hazardous to the aquatic environment - chronic hazard	3	Aquatic Chronic 3	H412

for full text of abbreviations: see SECTION 16.

the most important adverse physicochemical, human health and environmental effects  
spillage and fire water can cause pollution of watercourses.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

- signal word warning

- pictograms

GHS07



## Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

- hazard statements
  - H319 causes serious eye irritation.
  - H412 harmful to aquatic life with long lasting effects.
- precautionary statements
  - P273 avoid release to the environment.
  - P280 wear protective gloves/protective clothing/eye protection/face protection.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P337+P313 if eye irritation persists: Get medical advice/attention.
  - P501 dispose of contents/container to industrial combustion plant.

### 2.3 other hazards

results of PBT and vPvB assessment


this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## SECTION 3: Composition/information on ingredients

### 3.1 substances

not relevant (mixture)

### 3.2 mixtures

name of substance	identifier	wt%	classification acc. to GHS	pictograms
Triton X-100	CAS No 9002-93-1  EC No 618-344-0	≤ 1	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	

for full text of abbreviations: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

### 4.3 indication of any immediate medical attention and special treatment needed

none

## Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO<sub>x</sub>)

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

#### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation  
use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

#### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as  
frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls  
general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.



## Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	1 g/cm <sup>3</sup> at 20 °C
vapour density	this information is not available
solubility(ies)	not determined

##### partition coefficient

- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none

#### 9.2 other information

there is no additional information

## Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

see below "Conditions to avoid".

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### classification according to GHS (1272/2008/EC, CLP)

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

causes serious eye irritation.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

shall not be classified as a specific target organ toxicant (single exposure).

specific target organ toxicity - repeated exposure

shall not be classified as a specific target organ toxicant (repeated exposure).

## Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

aspiration hazard  
shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

- 12.1 toxicity**  
harmful to aquatic life with long lasting effects.
- 12.2 persistence and degradability**  
data are not available.
- 12.3 bioaccumulative potential**  
data are not available.
- 12.4 mobility in soil**  
data are not available.
- 12.5 results of PBT and vPvB assessment**  
data are not available.
- 12.6 other adverse effects**  
data are not available.

### SECTION 13: Disposal considerations

- 13.1 waste treatment methods**  
sewage disposal-relevant information  
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.  
waste treatment of containers/packagings  
completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.
- remarks**  
please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

- |  |   |
|--|---|
| <b>14.1 UN number</b>  | not subject to transport regulations                                  |
| <b>14.2 UN proper shipping name</b>  | not relevant  |
| <b>14.3 transport hazard class(es)</b>   | not assigned  |
| <b>14.4 packing group</b>  | not assigned  |
| <b>14.5 environmental hazards</b>  | non-environmentally hazardous acc. to the dangerous goods regulations |
| <b>14.6 special precautions for user</b>                                       | there is no additional information.                                   |
| <b>14.7 transport in bulk according to Annex II of MARPOL and the IBC Code</b> | the cargo is not intended to be carried in bulk.                      |

## Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

### Information for each of the UN Model Regulations

#### transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

not subject to ADR. not subject to RID.

#### European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)

identifier number	9006
proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
class	9
number of cones/blue lights	0

#### International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

#### International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

#### 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.2 Chemical Safety Assessment

chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations

## Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

abbr.	descriptions of used abbreviations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
vPvB	Very Persistent and very Bioaccumulative

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### list of relevant phrases (code and full text as stated in chapter 2 and 3)

code	text
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

**Wash buffer iW3**

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

- signal word not required

- pictograms not required

- supplemental hazard information

EUH210 safety data sheet available on request.

#### 2.3 other hazards

there is no additional information.

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## Wash buffer iW3

version number: GHS 1.0


date of compilation: 2019-11-22

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

name of substance	identifier	wt%	classification acc. to GHS	pictograms
Lithium chloride	CAS No 7447-41-8  EC No 231-212-3  REACH Reg. No 01-2119560574-35-xxxx	≤ 2	Acute Tox. 4 / H302	

for full text of abbreviations: see SECTION 16.

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO<sub>x</sub>)

## Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

## SECTION 6: Accidental release measures

### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

### 7.3 specific end use(s)

see section 16 for a general overview.



## Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

relevant DNELs of components of the mixture						
name of substance	CAS No	endpoint	threshold level	protection goal, route of exposure	used in	exposure time
Lithium chloride	7447-41-8	DNEL	10 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Lithium chloride	7447-41-8	DNEL	30 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - systemic effects
Lithium chloride	7447-41-8	DNEL	73.2 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

relevant PNECs of components of the mixture						
name of substance	CAS No	endpoint	threshold level	organism	environmental compartment	exposure time
Lithium chloride	7447-41-8	PNEC	10.4 mg/l	aquatic organisms	freshwater	short-term (single instance)
Lithium chloride	7447-41-8	PNEC	1.04 mg/l	aquatic organisms	marine water	short-term (single instance)
Lithium chloride	7447-41-8	PNEC	140.2 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Lithium chloride	7447-41-8	PNEC	49.9 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Lithium chloride	7447-41-8	PNEC	4.99 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Lithium chloride	7447-41-8	PNEC	4.13 mg/kg	terrestrial organisms	soil	short-term (single instance)

#### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

## Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	1 g/cm <sup>3</sup> at 20 °C
vapour density	this information is not available
solubility(ies)	not determined

##### partition coefficient

- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none

#### 9.2 other information

there is no additional information

## Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### classification according to GHS (1272/2008/EC, CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

shall not be classified as a specific target organ toxicant (single exposure).

specific target organ toxicity - repeated exposure

shall not be classified as a specific target organ toxicant (repeated exposure).

## Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

aspiration hazard  
shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

- 12.1 toxicity**  
shall not be classified as hazardous to the aquatic environment.
- 12.2 persistence and degradability**  
data are not available.
- 12.3 bioaccumulative potential**  
data are not available.
- 12.4 mobility in soil**  
data are not available.
- 12.5 results of PBT and vPvB assessment**  
data are not available.
- 12.6 other adverse effects**  
data are not available.

### SECTION 13: Disposal considerations

- 13.1 waste treatment methods**  
sewage disposal-relevant information  
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.  
waste treatment of containers/packagings  
completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.
- remarks**  
please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

- |  |   |
|--|---|
| <b>14.1 UN number</b>  | not subject to transport regulations                                  |
| <b>14.2 UN proper shipping name</b>  | not relevant  |
| <b>14.3 transport hazard class(es)</b>   | none  |
| <b>14.4 packing group</b>  | not assigned to a packing group                                       |
| <b>14.5 environmental hazards</b>  | non-environmentally hazardous acc. to the dangerous goods regulations |
| <b>14.6 special precautions for user</b>                                       | there is no additional information.                                   |
| <b>14.7 transport in bulk according to Annex II of MARPOL and the IBC Code</b> | the cargo is not intended to be carried in bulk.                      |

## Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

### Information for each of the UN Model Regulations

#### transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

not subject to ADR, RID and ADN.

#### International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

#### International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

## SECTION 15: Regulatory information

### 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture

### 15.2 Chemical Safety Assessment

chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

### abbreviations and acronyms

abbr.	descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration

## Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

abbr.	descriptions of used abbreviations
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### list of relevant phrases (code and full text as stated in chapter 2 and 3)

code	text
H302	Harmful if swallowed.

### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## ChIP-seq grade water

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-23

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

identification of the substance

**ChIP-seq grade water**

registration number (REACH)

this information is not available

CAS number

7732-18-5

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

this substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

#### 2.3 other hazards

results of PBT and vPvB assessment

according to the results of its assessment, this substance is not a PBT or a vPvB.

## ChIP-seq grade water

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-23

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

name of substance	ChIP-seq grade water
identifiers	
CAS No	7732-18-5
molecular formula	H <sub>2</sub> O
molar mass	18.02 g/mol

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

##### general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

##### following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

##### following skin contact

wash with plenty of soap and water.

##### following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

##### following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

##### suitable extinguishing media

water spray, alcohol resistant foam, BC-powder, carbon dioxide (CO<sub>2</sub>)

##### unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.



## ChIP-seq grade water

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-23

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel  
remove persons to safety.

for emergency responders  
wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

#### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill  
covering of drains

advice on how to clean up a spill  
wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques  
use of adsorbent materials.

other information relating to spills and releases  
place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation  
use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

#### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as  
frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

## ChIP-seq grade water

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-23

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	0 °C
initial boiling point and boiling range	100 °C
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)

## ChIP-seq grade water

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-23

explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	
- water solubility	miscible in any proportion
partition coefficient	
- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
<b>9.2 other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

## ChIP-seq grade water

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-23

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

##### classification according to GHS (1272/2008/EC, CLP)

this substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

##### acute toxicity

shall not be classified as acutely toxic.

##### skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

##### serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

##### respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

##### germ cell mutagenicity

shall not be classified as germ cell mutagenic.

##### carcinogenicity

shall not be classified as carcinogenic.

##### reproductive toxicity

shall not be classified as a reproductive toxicant.

##### specific target organ toxicity - single exposure

shall not be classified as a specific target organ toxicant (single exposure).

##### specific target organ toxicity - repeated exposure

shall not be classified as a specific target organ toxicant (repeated exposure).

##### aspiration hazard

shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

#### 12.1 toxicity

shall not be classified as hazardous to the aquatic environment.

#### 12.2 persistence and degradability

data are not available.

#### 12.3 bioaccumulative potential

data are not available.

#### 12.4 mobility in soil

data are not available.

#### 12.5 results of PBT and vPvB assessment

data are not available.

#### 12.6 other adverse effects

data are not available.

## ChIP-seq grade water

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-23

### SECTION 13: Disposal considerations

#### 13.1 waste treatment methods

waste treatment-relevant information

recycling/reclamation of other inorganic materials.

sewage disposal-relevant information

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

#### remarks

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

- |  |   |
|--|---|
| <b>14.1 UN number</b>  | not subject to transport regulations                                  |
| <b>14.2 UN proper shipping name</b>  | not relevant  |
| <b>14.3 transport hazard class(es)</b>   | none  |
| <b>14.4 packing group</b>  | not assigned to a packing group                                       |
| <b>14.5 environmental hazards</b>  | non-environmentally hazardous acc. to the dangerous goods regulations |
| <b>14.6 special precautions for user</b>                                       | there is no additional information.                                   |
| <b>14.7 transport in bulk according to Annex II of MARPOL and the IBC Code</b> | the cargo is not intended to be carried in bulk.                      |

#### Information for each of the UN Model Regulations

##### **transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

not subject to ADR, RID and ADN.

##### **International Maritime Dangerous Goods Code (IMDG)**

not subject to IMDG.

##### **International Civil Aviation Organization (ICAO-IATA/DGR)**

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 Chemical Safety Assessment**  
no Chemical Safety Assessment has been carried out for this substance.

## ChIP-seq grade water

version number: GHS 2.0  
replaces version of: 2019-11-22 (GHS 1)

revision: 2019-12-23

### SECTION 16: Other information

#### indication of changes (revised safety data sheet)

section	former entry (text/value)	actual entry (text/value)	safety-rel- evant
5.1	suitable extinguishing media: not applicable	suitable extinguishing media: water spray, alcohol resistant foam, BC-powder, car- bon dioxide (CO2)	yes
5.1	unsuitable extinguishing media: not applicable	unsuitable extinguishing media: water jet	yes

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

#### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## lysis buffer iL1

version number: GHS 1.1

date of compilation: 2020-01-23

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

**lysis buffer iL1**

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

section	hazard class	category	hazard class and cat- egory	hazard state- ment
4.1C	hazardous to the aquatic environment - chronic hazard	3	Aquatic Chronic 3	H412

for full text of abbreviations: see SECTION 16.

the most important adverse physicochemical, human health and environmental effects

spillage and fire water can cause pollution of watercourses.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

- signal word not required

- pictograms not required

- hazard statements

H412 harmful to aquatic life with long lasting effects.

- precautionary statements

P273 avoid release to the environment.

P501 dispose of contents/container to industrial combustion plant.

## lysis buffer iL1

version number: GHS 1.1

date of compilation: 2020-01-23

### 2.3 other hazards

results of PBT and vPvB assessment  
this mixture does not contain any substances that are assessed to be a PBT or a vPvB.


## SECTION 3: Composition/information on ingredients

### 3.1 substances

not relevant (mixture)

### 3.2 mixtures

description of the mixture

name of substance	identifier	wt%	classification acc. to GHS	pictograms
Triton X-100	CAS No 9002-93-1  EC No 618-344-0	≤ 1	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	

for full text of abbreviations: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

### 4.3 indication of any immediate medical attention and special treatment needed

none

## SECTION 5: Firefighting measures

### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO2)

unsuitable extinguishing media

water jet



## lysis buffer iL1

version number: GHS 1.1

date of compilation: 2020-01-23

### 5.2 special hazards arising from the substance or mixture

hazardous combustion products  
nitrogen oxides (NO<sub>x</sub>)

### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

## SECTION 6: Accidental release measures

### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel  
remove persons to safety.

for emergency responders  
wear breathing apparatus if exposed to vapours/dust/spray/gases.

### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill  
covering of drains

advice on how to clean up a spill  
wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques  
use of adsorbent materials.

other information relating to spills and releases  
place in appropriate containers for disposal. ventilate affected area.

### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation  
use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as  
frost

## lysis buffer iL1

version number: GHS 1.1

date of compilation: 2020-01-23

### 7.3 specific end use(s)

see section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 control parameters

this information is not available.

### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/ impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 information on basic physical and chemical properties

#### appearance

physical state	liquid
colour	colourless
odour	odourless

#### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined

## lysis buffer iL1

version number: GHS 1.1

date of compilation: 2020-01-23

flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined

partition coefficient

- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none

9.2

**other information**

there is no additional information

## SECTION 10: Stability and reactivity

### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

### 10.2 chemical stability

see below "Conditions to avoid".

### 10.3 possibility of hazardous reactions

no known hazardous reactions.

### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

### 10.5 incompatible materials

there is no additional information.

### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

## lysis buffer iL1

version number: GHS 1.1

date of compilation: 2020-01-23

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### classification according to GHS (1272/2008/EC, CLP)

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

shall not be classified as a specific target organ toxicant (single exposure).

specific target organ toxicity - repeated exposure

shall not be classified as a specific target organ toxicant (repeated exposure).

aspiration hazard

shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

#### 12.1 toxicity

harmful to aquatic life with long lasting effects.

#### 12.2 persistence and degradability

data are not available.

#### 12.3 bioaccumulative potential

data are not available.

#### 12.4 mobility in soil

data are not available.

#### 12.5 results of PBT and vPvB assessment

data are not available.

#### 12.6 other adverse effects

data are not available.

## lysis buffer iL1

version number: GHS 1.1

date of compilation: 2020-01-23

### SECTION 13: Disposal considerations

#### 13.1 waste treatment methods

sewage disposal-relevant information

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

#### remarks

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

- |  |   |
|--|---|
| <b>14.1 UN number</b>  | not subject to transport regulations                                  |
| <b>14.2 UN proper shipping name</b>  | not relevant  |
| <b>14.3 transport hazard class(es)</b>   | not assigned  |
| <b>14.4 packing group</b>  | not assigned  |
| <b>14.5 environmental hazards</b>  | non-environmentally hazardous acc. to the dangerous goods regulations |
| <b>14.6 special precautions for user</b>                                       | there is no additional information.                                   |
| <b>14.7 transport in bulk according to Annex II of MARPOL and the IBC Code</b> | the cargo is not intended to be carried in bulk.                      |

#### Information for each of the UN Model Regulations

##### **transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

not subject to ADR. not subject to RID.

##### **European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)**

identifier number	9006
proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
class	9
number of cones/blue lights	0

##### **International Maritime Dangerous Goods Code (IMDG)**

not subject to IMDG.

##### **International Civil Aviation Organization (ICAO-IATA/DGR)**

not subject to ICAO-IATA.

## lysis buffer iL1

version number: GHS 1.1

date of compilation: 2020-01-23

### SECTION 15: Regulatory information

#### 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.2 Chemical Safety Assessment

chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
vPvB	Very Persistent and very Bioaccumulative

## lysis buffer iL1

version number: GHS 1.1

date of compilation: 2020-01-23

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### list of relevant phrases (code and full text as stated in chapter 2 and 3)

code	text
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## Lysis Buffer iL2

version number: GHS 2.0  
replaces version of: 2019-12-02 (GHS 1)

revision: 2019-12-23

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name **Lysis Buffer iL2**  
registration number (REACH) not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service +32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)  
this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)  
not required

#### 2.3 other hazards

results of PBT and vPvB assessment  
this mixture does not contain any substances that are assessed to be a PBT or a vPvB.



## Lysis Buffer iL2

version number: GHS 2.0  
replaces version of: 2019-12-02 (GHS 1)

revision: 2019-12-23

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This mixture does not contain any potentially hazardous products.

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO<sub>x</sub>)

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

## Lysis Buffer iL2

version number: GHS 2.0  
replaces version of: 2019-12-02 (GHS 1)

revision: 2019-12-23

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel  
remove persons to safety.

for emergency responders  
wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

#### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill  
covering of drains

advice on how to clean up a spill  
wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques  
use of adsorbent materials.

other information relating to spills and releases  
place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation  
use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

#### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as  
frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

## Lysis Buffer iL2

version number: GHS 2.0  
replaces version of: 2019-12-02 (GHS 1)

revision: 2019-12-23

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)

## Lysis Buffer iL2

version number: GHS 2.0  
replaces version of: 2019-12-02 (GHS 1)

revision: 2019-12-23

explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined
partition coefficient	
- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
<b>9.2 other information</b>	there is no additional information

## SECTION 10: Stability and reactivity

### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3 possibility of hazardous reactions

no known hazardous reactions.

### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

### 10.5 incompatible materials

there is no additional information.

### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

## Lysis Buffer iL2

version number: GHS 2.0  
replaces version of: 2019-12-02 (GHS 1)

revision: 2019-12-23

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### classification according to GHS (1272/2008/EC, CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

shall not be classified as a specific target organ toxicant (single exposure).

specific target organ toxicity - repeated exposure

shall not be classified as a specific target organ toxicant (repeated exposure).

aspiration hazard

shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

#### 12.1 toxicity

shall not be classified as hazardous to the aquatic environment.

#### 12.2 persistence and degradability

data are not available.

#### 12.3 bioaccumulative potential

data are not available.

#### 12.4 mobility in soil

data are not available.

#### 12.5 results of PBT and vPvB assessment

data are not available.

## Lysis Buffer iL2

version number: GHS 2.0  
replaces version of: 2019-12-02 (GHS 1)

revision: 2019-12-23

### 12.6 other adverse effects

data are not available.

## SECTION 13: Disposal considerations

### 13.1 waste treatment methods

sewage disposal-relevant information

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

#### remarks

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## SECTION 14: Transport information

- |  |   |
|--|---|
| <b>14.1 UN number</b>  | not subject to transport regulations                                  |
| <b>14.2 UN proper shipping name</b>  | not relevant  |
| <b>14.3 transport hazard class(es)</b>   | none  |
| <b>14.4 packing group</b>  | not assigned to a packing group                                       |
| <b>14.5 environmental hazards</b>  | non-environmentally hazardous acc. to the dangerous goods regulations |
| <b>14.6 special precautions for user</b>                                       | there is no additional information.                                   |
| <b>14.7 transport in bulk according to Annex II of MARPOL and the IBC Code</b> | the cargo is not intended to be carried in bulk.                      |

### Information for each of the UN Model Regulations

#### **transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

not subject to ADR, RID and ADN.

#### **International Maritime Dangerous Goods Code (IMDG)**

not subject to IMDG.

#### **International Civil Aviation Organization (ICAO-IATA/DGR)**

not subject to ICAO-IATA.

## SECTION 15: Regulatory information

- 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 Chemical Safety Assessment**  
chemical safety assessments for substances in this mixture were not carried out.

## Lysis Buffer iL2

version number: GHS 2.0  
replaces version of: 2019-12-02 (GHS 1)

revision: 2019-12-23

### SECTION 16: Other information

#### indication of changes (revised safety data sheet)

section	former entry (text/value)	actual entry (text/value)	safety-relevant
3.2	mixtures: description of the mixture	mixtures: description of the mixture  This mixture does not contain any potentially hazardous products.	yes

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

#### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## 5x ChIP Buffer iC1

version number: GHS 2.1  
replaces version of: 2019-11-26 (GHS 1)

revision: 2020-01-23

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name **5x ChIP Buffer iC1**  
registration number (REACH) not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service +32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

section	hazard class	category	hazard class and category	hazard statement
3.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318
4.1C	hazardous to the aquatic environment - chronic hazard	2	Aquatic Chronic 2	H411

for full text of abbreviations: see SECTION 16.

the most important adverse physicochemical, human health and environmental effects  
spillage and fire water can cause pollution of watercourses.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

- signal word danger

- pictograms

GHS05, GHS09





## 5x ChIP Buffer iC1

version number: GHS 2.1  
replaces version of: 2019-11-26 (GHS 1)

revision: 2020-01-23

- hazard statements
  - H318 causes serious eye damage.
  - H411 toxic to aquatic life with long lasting effects.
- precautionary statements
  - P273 avoid release to the environment.
  - P280 wear protective gloves/protective clothing/eye protection/face protection.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P310 immediately call a POISON CENTER/doctor.
  - P391 collect spillage.
  - P501 dispose of contents/container to industrial combustion plant.
- hazardous ingredients for labelling Triton X-100

### 2.3 other hazards

results of PBT and vPvB assessment  
this mixture does not contain any substances that are assessed to be a PBT or a vPvB.


## SECTION 3: Composition/information on ingredients

### 3.1 substances

not relevant (mixture)

### 3.2 mixtures

description of the mixture

name of substance	identifier	wt%	classification acc. to GHS	pictograms
Triton X-100	CAS No 9002-93-1  EC No 618-344-0	≤ 10	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	

for full text of abbreviations: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

## 5x ChIP Buffer iC1

version number: GHS 2.1  
replaces version of: 2019-11-26 (GHS 1)

revision: 2020-01-23

### 4.3 indication of any immediate medical attention and special treatment needed

none

## SECTION 5: Firefighting measures

### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

### 5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

## SECTION 6: Accidental release measures

### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it. if substance has entered a water course or sewer, inform the responsible authority.

### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## 5x ChIP Buffer iC1

version number: GHS 2.1  
replaces version of: 2019-11-26 (GHS 1)

revision: 2020-01-23

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation  
use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

#### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as  
frost

- packaging compatibilities  
only packagings which are approved (e.g. acc. to ADR) may be used.

#### 7.3 specific end use(s)

see section 16 for a general overview.

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls  
general ventilation.

individual protection measures (personal protective equipment)

eye/face protection  
wear eye/face protection.

skin protection

- hand protection  
wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

## 5x ChIP Buffer iC1

version number: GHS 2.1  
replaces version of: 2019-11-26 (GHS 1)

revision: 2020-01-23

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined

##### partition coefficient

- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none

#### 9.2

<b>other information</b>	there is no additional information
--------------------------	------------------------------------

## 5x ChIP Buffer iC1

version number: GHS 2.1  
replaces version of: 2019-11-26 (GHS 1)

revision: 2020-01-23

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

see below "Conditions to avoid".

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

oxidisers

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### classification according to GHS (1272/2008/EC, CLP)

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

causes serious eye damage.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

shall not be classified as a specific target organ toxicant (single exposure).

specific target organ toxicity - repeated exposure

shall not be classified as a specific target organ toxicant (repeated exposure).

## 5x ChIP Buffer iC1

version number: GHS 2.1  
replaces version of: 2019-11-26 (GHS 1)

revision: 2020-01-23

aspiration hazard  
shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

- 12.1 toxicity**  
toxic to aquatic life with long lasting effects.
- 12.2 persistence and degradability**  
data are not available.
- 12.3 bioaccumulative potential**  
data are not available.
- 12.4 mobility in soil**  
data are not available.
- 12.5 results of PBT and vPvB assessment**  
data are not available.
- 12.6 other adverse effects**  
data are not available.

### SECTION 13: Disposal considerations

- 13.1 waste treatment methods**  
sewage disposal-relevant information  
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.
- waste treatment of containers/packagings  
it is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.
- remarks**  
please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

- |  |   |
|--|---|
| <b>14.1 UN number</b>  | 3082  |
| <b>14.2 UN proper shipping name</b>  | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| technical name (hazardous ingredients)                                       | Triton X-100  |
| <b>14.3 transport hazard class(es)</b>                                       |   |
| class  | 9 (environmentally hazardous)                       |
| <b>14.4 packing group</b>  | III (substance presenting low danger)               |
| <b>14.5 environmental hazards</b>  | hazardous to the aquatic environment                |
| environmentally hazardous substance (aquatic environment)                    | Triton X-100  |
| <b>14.6 special precautions for user</b>                                     |   |
| provisions for dangerous goods (ADR) should be complied within the premises. |   |

## 5x ChIP Buffer iC1

version number: GHS 2.1  
replaces version of: 2019-11-26 (GHS 1)

revision: 2020-01-23

### 14.7 transport in bulk according to Annex II of MARPOL and the IBC Code

the cargo is not intended to be carried in bulk.

#### Information for each of the UN Model Regulations

##### transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

UN number	3082
proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
class	9
classification code	M6
packing group	III
danger label(s)	9, fish and tree



environmental hazards	yes (hazardous to the aquatic environment)
special provisions (SP)	274, 335, 375, 601
excepted quantities (EQ)	E1
limited quantities (LQ)	5 L
transport category (TC)	3
tunnel restriction code (TRC)	-
hazard identification No	90
Emergency Action Code	3Z

##### International Maritime Dangerous Goods Code (IMDG)

UN number	3082
proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
class	9
marine pollutant	yes (hazardous to the aquatic environment)
packing group	III
danger label(s)	9, fish and tree





special provisions (SP)	274, 335, 969
excepted quantities (EQ)	E1
limited quantities (LQ)	5 L
EmS	F-A, S-F
stowage category	A

## 5x ChIP Buffer iC1

version number: GHS 2.1  
replaces version of: 2019-11-26 (GHS 1)

revision: 2020-01-23

### International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	3082
proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
class	9
environmental hazards	yes (hazardous to the aquatic environment)
packing group	III
danger label(s)	9, fish and tree
 	
special provisions (SP)	A97, A158, A197
excepted quantities (EQ)	E1
limited quantities (LQ)	30 kg

### SECTION 15: Regulatory information

#### 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.2 Chemical Safety Assessment

chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### indication of changes (revised safety data sheet)

section	former entry (text/value)	actual entry (text/value)	safety-rel- evant
1.1	product code(s): C01019015		yes
3.2	mixtures	mixtures: description of the mixture	yes

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)



## 5x ChIP Buffer iC1

version number: GHS 2.1  
replaces version of: 2019-11-26 (GHS 1)

revision: 2020-01-23

abbr.	descriptions of used abbreviations
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
vPvB	Very Persistent and very Bioaccumulative

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### list of relevant phrases (code and full text as stated in chapter 2 and 3)

code	text
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

## 5x ChIP Buffer iC1

version number: GHS 2.1  
replaces version of: 2019-11-26 (GHS 1)

revision: 2020-01-23

---

### **disclaimer**

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## Tagmentation buffer

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

**Tagmentation buffer**

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

section	hazard class	category	hazard class and cat- egory	hazard state- ment
2.6	flammable liquid	3	Flam. Liq. 3	H226
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.7	reproductive toxicity	1B	Repr. 1B	H360D

for full text of abbreviations: see SECTION 16.

the most important adverse physicochemical, human health and environmental effects

the product is combustible and can be ignited by potential ignition sources.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

- signal word danger

- pictograms

GHS02, GHS07, GHS08



## Tagmentation buffer

version number: GHS 1.0

date of compilation: 2020-05-26

- hazard statements
  - H226 flammable liquid and vapour.
  - H319 causes serious eye irritation.
  - H360D may damage the unborn child.
- precautionary statements
  - P210 keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P280 wear protective gloves/protective clothing/eye protection/face protection.
  - P308+P313 IF exposed or concerned: Get medical advice/attention.
  - P337+P313 if eye irritation persists: Get medical advice/attention.
  - P370+P378 in case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
  - P403+P235 store in a well-ventilated place. Keep cool.
  - P501 dispose of contents/container to industrial combustion plant.
- hazardous ingredients for labelling N,N-dimethylformamide

### 2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.




## SECTION 3: Composition/information on ingredients

### 3.1 substances

not relevant (mixture)

### 3.2 mixtures

description of the mixture

name of substance	identifier	wt%	classification acc. to GHS	pictograms
N,N-dimethylformamide	CAS No 68-12-2  EC No 200-679-5  index No 616-001-00-X  REACH Reg. No 01-2119475605-32-xxxx	≤ 10	Flam. Liq. 3 / H226 Acute Tox. 4 / H312 Acute Tox. 3 / H331 Eye Irrit. 2 / H319 Repr. 1B / H360D	  

for full text of abbreviations: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

## Tagmentation buffer

version number: GHS 1.0

date of compilation: 2020-05-26

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

### 4.3 indication of any immediate medical attention and special treatment needed

none

## SECTION 5: Firefighting measures

### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

### 5.2 special hazards arising from the substance or mixture

in case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. solvent vapours are heavier than air and may spread along floors. places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

hazardous combustion products

nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

## SECTION 6: Accidental release measures

### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

## Tagmentation buffer

version number: GHS 1.0

date of compilation: 2020-05-26

### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. avoidance of ignition sources. keep away from sources of ignition - No smoking. take precautionary measures against static discharge. use only in well-ventilated areas. due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. ground/bond container and receiving equipment. use explosion-proof electrical/ventilating/lighting/equipment. use only non-sparking tools.

- specific notes/details

places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. vapours are heavier than air, spread along floors and form explosive mixtures with air. vapours may form explosive mixtures with air.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

### 7.2 conditions for safe storage, including any incompatibilities

managing of associated risks

- explosive atmospheres

keep container tightly closed and in a well-ventilated place. use local and general ventilation. keep cool. protect from sunlight.

- flammability hazards

keep away from sources of ignition - No smoking. keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. take precautionary measures against static discharge. protect from sunlight.

control of effects

protect against external exposure, such as

frost

- ventilation requirements

use local and general ventilation. ground/bond container and receiving equipment.

- packaging compatibilities

only packagings which are approved (e.g. acc. to ADR) may be used.

### 7.3 specific end use(s)

see section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 control parameters

## Tagmentation buffer

version number: GHS 1.0

date of compilation: 2020-05-26

occupational exposure limit values (Workplace Exposure Limits)											
country	name of agent	CAS No	identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Ceiling-C [ppm]	Ceiling-C [mg/m <sup>3</sup> ]	notation	source
EU	N,N-dimethylformamide	68-12-2	IOELV	5	15	10	30				2009/161/EU
GB	N,N-dimethylformamide	68-12-2	WEL	5	15	10	30				EH40/2005

### notation

Ceiling-C  
STEL

ceiling value is a limit value above which exposure should not occur  
short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA

time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

relevant DNELs of components of the mixture						
name of substance	CAS No	endpoint	threshold level	protection goal, route of exposure	used in	exposure time
N,N-dimethylformamide	68-12-2	DNEL	15 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
N,N-dimethylformamide	68-12-2	DNEL	30 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - systemic effects
N,N-dimethylformamide	68-12-2	DNEL	15 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - local effects
N,N-dimethylformamide	68-12-2	DNEL	30 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - local effects
N,N-dimethylformamide	68-12-2	DNEL	3.31 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
N,N-dimethylformamide	68-12-2	DNEL	26.3 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects
N,N-dimethylformamide	68-12-2	DNEL	446 µg/cm <sup>2</sup>	human, dermal	worker (industry)	chronic - local effects
N,N-dimethylformamide	68-12-2	DNEL	5,900 µg/cm <sup>2</sup>	human, dermal	worker (industry)	acute - local effects

relevant PNECs of components of the mixture						
name of substance	CAS No	endpoint	threshold level	organism	environmental compartment	exposure time
N,N-dimethylformamide	68-12-2	PNEC	30 mg/l	aquatic organisms	freshwater	short-term (single instance)
N,N-dimethylformamide	68-12-2	PNEC	3 mg/l	aquatic organisms	marine water	short-term (single instance)
N,N-dimethylformamide	68-12-2	PNEC	123 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
N,N-dimethylformamide	68-12-2	PNEC	115.2 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
N,N-dimethylformamide	68-12-2	PNEC	11.52 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
N,N-dimethylformamide	68-12-2	PNEC	56.97 mg/kg	terrestrial organisms	soil	short-term (single instance)

## Tagmentation buffer

version number: GHS 1.0

date of compilation: 2020-05-26

### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 information on basic physical and chemical properties

#### appearance

physical state	liquid
colour	colourless
odour	characteristic

#### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	not determined



## Tagmentation buffer

version number: GHS 1.0

date of compilation: 2020-05-26

vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined
partition coefficient	
- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
<b>9.2 other information</b>	there is no additional information

## SECTION 10: Stability and reactivity

### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". the mixture contains reactive substance(s). risk of ignition.

if heated:

risk of ignition

### 10.2 chemical stability

see below "Conditions to avoid".

### 10.3 possibility of hazardous reactions

no known hazardous reactions.

### 10.4 conditions to avoid

keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

hints to prevent fire or explosion

use explosion-proof electrical/ventilating/lighting/equipment. use only non-sparking tools. take precautionary measures against static discharge.

### 10.5 incompatible materials

oxidisers

### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

## Tagmentation buffer

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### classification according to GHS (1272/2008/EC, CLP)

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

causes serious eye irritation.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

may damage the unborn child.

specific target organ toxicity - single exposure

shall not be classified as a specific target organ toxicant (single exposure).

specific target organ toxicity - repeated exposure

shall not be classified as a specific target organ toxicant (repeated exposure).

aspiration hazard

shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

#### 12.1 toxicity

shall not be classified as hazardous to the aquatic environment.

#### 12.2 persistence and degradability

data are not available.

#### 12.3 bioaccumulative potential

data are not available.

#### 12.4 mobility in soil

data are not available.

#### 12.5 results of PBT and vPvB assessment

data are not available.

#### 12.6 other adverse effects

data are not available.

## Tagmentation buffer

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 13: Disposal considerations

#### 13.1 waste treatment methods

waste treatment-relevant information

solvent reclamation/regeneration.

sewage disposal-relevant information

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings

it is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

#### remarks

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

- |  |  |
|--|--|
| <b>14.1 UN number</b>  | 1993   |
| <b>14.2 UN proper shipping name</b>  | FLAMMABLE LIQUID, N.O.S.   |
| technical name (hazardous ingredients)   | N,N-dimethylformamide  |
| <b>14.3 transport hazard class(es)</b>   |  |
| class  | 3 (flammable liquids)  |
| <b>14.4 packing group</b>  | III (substance presenting low danger)  |
| <b>14.5 environmental hazards</b>  | non-environmentally hazardous acc. to the dangerous goods regulations        |
| <b>14.6 special precautions for user</b>                                       | provisions for dangerous goods (ADR) should be complied within the premises. |
| <b>14.7 transport in bulk according to Annex II of MARPOL and the IBC Code</b> | the cargo is not intended to be carried in bulk.                             |

#### Information for each of the UN Model Regulations

##### **transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

UN number	1993
proper shipping name	FLAMMABLE LIQUID, N.O.S.
class	3
classification code	F1
packing group	III
danger label(s)	3



special provisions (SP)	274, 601
excepted quantities (EQ)	E1
limited quantities (LQ)	5 L

## Tagmentation buffer

version number: GHS 1.0

date of compilation: 2020-05-26

transport category (TC)	3
tunnel restriction code (TRC)	D/E
hazard identification No	30
Emergency Action Code	3Y

### International Maritime Dangerous Goods Code (IMDG)

UN number	1993
proper shipping name	FLAMMABLE LIQUID, N.O.S.
class	3
marine pollutant	-
packing group	III
danger label(s)	3



special provisions (SP)	223, 274, 955
excepted quantities (EQ)	E1
limited quantities (LQ)	5 L
EmS	F-E, <u>S-E</u>
stowage category	A

### International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	1993
proper shipping name	Flammable liquid, n.o.s.
class	3
packing group	III
danger label(s)	3



special provisions (SP)	A3
excepted quantities (EQ)	E1
limited quantities (LQ)	10 L

## SECTION 15: Regulatory information

### 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture

### 15.2 Chemical Safety Assessment

chemical safety assessments for substances in this mixture were not carried out.

## Tagmentation buffer

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
2009/161/EU	Commission Directive establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> )
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
IOELV	Indicative occupational exposure limit value
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Repr.	Reproductive toxicity

## Tagmentation buffer

version number: GHS 1.0

date of compilation: 2020-05-26

abbr.	descriptions of used abbreviations
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### list of relevant phrases (code and full text as stated in chapter 2 and 3)

code	text
H226	Flammable liquid and vapour.
H312	Harmful in contact with skin.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H360D	May damage the unborn child.

### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## wash buffer tagW1

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

**wash buffer tagW1**

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

#### 2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This mixture does not contain any potentially hazardous products.

## wash buffer tagW1

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

##### general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

##### following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

##### following skin contact

wash with plenty of soap and water.

##### following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

##### following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

##### suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

##### unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

##### for non-emergency personnel

remove persons to safety.

##### for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.



## wash buffer tagW1

version number: GHS 1.0

date of compilation: 2020-05-26

### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

### 6.4 reference to other sections

personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

### 7.3 specific end use(s)

see section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 control parameters

this information is not available.

### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

## wash buffer tagW1

version number: GHS 1.0

date of compilation: 2020-05-26

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/ impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined

partition coefficient

- n-octanol/water (log KOW)	this information is not available
-----------------------------	-----------------------------------

## wash buffer tagW1

version number: GHS 1.0

date of compilation: 2020-05-26

	auto-ignition temperature	not determined
	viscosity	not determined
	explosive properties	none
	oxidising properties	none
<b>9.2</b>	<b>other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### classification according to GHS (1272/2008/EC, CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

## wash buffer tagW1

version number: GHS 1.0

date of compilation: 2020-05-26

**carcinogenicity**

shall not be classified as carcinogenic.

**reproductive toxicity**

shall not be classified as a reproductive toxicant.

**specific target organ toxicity - single exposure**

shall not be classified as a specific target organ toxicant (single exposure).

**specific target organ toxicity - repeated exposure**

shall not be classified as a specific target organ toxicant (repeated exposure).

**aspiration hazard**

shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

**12.1 toxicity**

shall not be classified as hazardous to the aquatic environment.

**12.2 persistence and degradability**

data are not available.

**12.3 bioaccumulative potential**

data are not available.

**12.4 mobility in soil**

data are not available.

**12.5 results of PBT and vPvB assessment**

data are not available.

**12.6 other adverse effects**

data are not available.

### SECTION 13: Disposal considerations

**13.1 waste treatment methods**

**sewage disposal-relevant information**

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

**waste treatment of containers/packages**

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

**remarks**

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## wash buffer tagW1

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 14: Transport information

- 14.1 UN number** not subject to transport regulations
- 14.2 UN proper shipping name** not relevant
- 14.3 transport hazard class(es)** none
- 14.4 packing group** not assigned to a packing group
- 14.5 environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 special precautions for user**  
there is no additional information.
- 14.7 transport in bulk according to Annex II of MARPOL and the IBC Code**  
the cargo is not intended to be carried in bulk.

#### Information for each of the UN Model Regulations

##### transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

not subject to ADR, RID and ADN.

##### International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

##### International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 Chemical Safety Assessment**  
chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code

## wash buffer tagW1

version number: GHS 1.0

date of compilation: 2020-05-26

abbr.	descriptions of used abbreviations
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## Wash Buffer tagW2

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

**Wash Buffer tagW2**

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

section	hazard class	category	hazard class and category	hazard state- ment
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319
4.1C	hazardous to the aquatic environment - chronic hazard	3	Aquatic Chronic 3	H412

for full text of abbreviations: see SECTION 16.

the most important adverse physicochemical, human health and environmental effects  
spillage and fire water can cause pollution of watercourses.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

- signal word warning

- pictograms

GHS07



## Wash Buffer tagW2

version number: GHS 1.0

date of compilation: 2020-05-26

- hazard statements
  - H319 causes serious eye irritation.
  - H412 harmful to aquatic life with long lasting effects.
- precautionary statements
  - P273 avoid release to the environment.
  - P280 wear protective gloves/protective clothing/eye protection/face protection.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P337+P313 if eye irritation persists: Get medical advice/attention.
  - P501 dispose of contents/container to industrial combustion plant.

### 2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.


## SECTION 3: Composition/information on ingredients

### 3.1 substances

not relevant (mixture)

### 3.2 mixtures

description of the mixture

name of substance	identifier	wt%	classification acc. to GHS	pictograms
Triton X-100	CAS No 9002-93-1  EC No 618-344-0	≤ 1	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	

for full text of abbreviations: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

### 4.3 indication of any immediate medical attention and special treatment needed

none



## Wash Buffer tagW2

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO<sub>x</sub>)

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

#### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## Wash Buffer tagW2

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation  
use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

#### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as  
frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls  
general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

## Wash Buffer tagW2

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined

##### partition coefficient

- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none

#### 9.2 other information

there is no additional information

## Wash Buffer tagW2

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

see below "Conditions to avoid".

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### classification according to GHS (1272/2008/EC, CLP)

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

causes serious eye irritation.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

shall not be classified as a specific target organ toxicant (single exposure).

specific target organ toxicity - repeated exposure

shall not be classified as a specific target organ toxicant (repeated exposure).

## Wash Buffer tagW2

version number: GHS 1.0

date of compilation: 2020-05-26

aspiration hazard  
shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

- 12.1 toxicity**  
harmful to aquatic life with long lasting effects.
- 12.2 persistence and degradability**  
data are not available.
- 12.3 bioaccumulative potential**  
data are not available.
- 12.4 mobility in soil**  
data are not available.
- 12.5 results of PBT and vPvB assessment**  
data are not available.
- 12.6 other adverse effects**  
data are not available.

### SECTION 13: Disposal considerations

- 13.1 waste treatment methods**  
sewage disposal-relevant information  
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.  
waste treatment of containers/packagings  
completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.
- remarks**  
please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

- |  |   |
|--|---|
| <b>14.1 UN number</b>  | not subject to transport regulations                                  |
| <b>14.2 UN proper shipping name</b>  | not relevant  |
| <b>14.3 transport hazard class(es)</b>   | not assigned  |
| <b>14.4 packing group</b>  | not assigned  |
| <b>14.5 environmental hazards</b>  | non-environmentally hazardous acc. to the dangerous goods regulations |
| <b>14.6 special precautions for user</b>                                       | there is no additional information.                                   |
| <b>14.7 transport in bulk according to Annex II of MARPOL and the IBC Code</b> | the cargo is not intended to be carried in bulk.                      |

## Wash Buffer tagW2

version number: GHS 1.0

date of compilation: 2020-05-26

### Information for each of the UN Model Regulations

#### transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

not subject to ADR. not subject to RID.

#### European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)

identifier number	9006
proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
class	9
number of cones/blue lights	0

#### International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

#### International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

## SECTION 15: Regulatory information

### 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture

### 15.2 Chemical Safety Assessment

chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

### abbreviations and acronyms

abbr.	descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations

## Wash Buffer tagW2

version number: GHS 1.0

date of compilation: 2020-05-26

abbr.	descriptions of used abbreviations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
vPvB	Very Persistent and very Bioaccumulative

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### list of relevant phrases (code and full text as stated in chapter 2 and 3)

code	text
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## Stripping Reagent

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

**Stripping Reagent**

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

#### 2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This mixture does not contain any potentially hazardous products.



## Stripping Reagent

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

##### general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

##### following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

##### following skin contact

wash with plenty of soap and water.

##### following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

##### following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

##### suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

##### unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

##### hazardous combustion products

nitrogen oxides (NO<sub>x</sub>)

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

##### for non-emergency personnel

remove persons to safety.

##### for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

## Stripping Reagent

version number: GHS 1.0

date of compilation: 2020-05-26

### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

### 7.3 specific end use(s)

see section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 control parameters

this information is not available.

### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

## Stripping Reagent

version number: GHS 1.0

date of compilation: 2020-05-26

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined

partition coefficient

- n-octanol/water (log KOW)	this information is not available
-----------------------------	-----------------------------------

## Stripping Reagent

version number: GHS 1.0

date of compilation: 2020-05-26

	auto-ignition temperature	not determined
	viscosity	not determined
	explosive properties	none
	oxidising properties	none
9.2	<b>other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### **classification according to GHS (1272/2008/EC, CLP)**

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

## Stripping Reagent

version number: GHS 1.0

date of compilation: 2020-05-26

**carcinogenicity**

shall not be classified as carcinogenic.

**reproductive toxicity**

shall not be classified as a reproductive toxicant.

**specific target organ toxicity - single exposure**

shall not be classified as a specific target organ toxicant (single exposure).

**specific target organ toxicity - repeated exposure**

shall not be classified as a specific target organ toxicant (repeated exposure).

**aspiration hazard**

shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

**12.1 toxicity**

shall not be classified as hazardous to the aquatic environment.

**12.2 persistence and degradability**

data are not available.

**12.3 bioaccumulative potential**

data are not available.

**12.4 mobility in soil**

data are not available.

**12.5 results of PBT and vPvB assessment**

data are not available.

**12.6 other adverse effects**

data are not available.

### SECTION 13: Disposal considerations

**13.1 waste treatment methods**

**sewage disposal-relevant information**

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

**waste treatment of containers/packages**

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

**remarks**

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## Stripping Reagent

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 14: Transport information

- 14.1 UN number** not subject to transport regulations
- 14.2 UN proper shipping name** not relevant
- 14.3 transport hazard class(es)** none
- 14.4 packing group** not assigned to a packing group
- 14.5 environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 special precautions for user**  
there is no additional information.
- 14.7 transport in bulk according to Annex II of MARPOL and the IBC Code**  
the cargo is not intended to be carried in bulk.

#### Information for each of the UN Model Regulations

##### transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

not subject to ADR, RID and ADN.

##### International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

##### International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 Chemical Safety Assessment**  
chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code

## Stripping Reagent

version number: GHS 1.0

date of compilation: 2020-05-26

abbr.	descriptions of used abbreviations
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## MgCl<sub>2</sub>

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

MgCl<sub>2</sub>

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

#### 2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This mixture does not contain any potentially hazardous products.



## MgCl<sub>2</sub>

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

##### general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

##### following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

##### following skin contact

wash with plenty of soap and water.

##### following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

##### following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

##### suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

##### unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

##### for non-emergency personnel

remove persons to safety.

##### for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

## MgCl<sub>2</sub>

version number: GHS 1.0

date of compilation: 2020-05-26

### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

### 6.4 reference to other sections

personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

### 7.3 specific end use(s)

see section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 control parameters

this information is not available.

### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

## MgCl<sub>2</sub>

version number: GHS 1.0

date of compilation: 2020-05-26

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/ impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined

partition coefficient

- n-octanol/water (log KOW)	this information is not available
-----------------------------	-----------------------------------

## MgCl<sub>2</sub>

version number: GHS 1.0

date of compilation: 2020-05-26

	auto-ignition temperature	not determined
	viscosity	not determined
	explosive properties	none
	oxidising properties	none
9.2	<b>other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### **classification according to GHS (1272/2008/EC, CLP)**

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

## MgCl<sub>2</sub>

version number: GHS 1.0

date of compilation: 2020-05-26

- carcinogenicity  
shall not be classified as carcinogenic.
- reproductive toxicity  
shall not be classified as a reproductive toxicant.
- specific target organ toxicity - single exposure  
shall not be classified as a specific target organ toxicant (single exposure).
- specific target organ toxicity - repeated exposure  
shall not be classified as a specific target organ toxicant (repeated exposure).
- aspiration hazard  
shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

- 12.1 toxicity**  
shall not be classified as hazardous to the aquatic environment.
- 12.2 persistence and degradability**  
data are not available.
- 12.3 bioaccumulative potential**  
data are not available.
- 12.4 mobility in soil**  
data are not available.
- 12.5 results of PBT and vPvB assessment**  
data are not available.
- 12.6 other adverse effects**  
data are not available.

### SECTION 13: Disposal considerations

- 13.1 waste treatment methods**
  - sewage disposal-relevant information  
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.
  - waste treatment of containers/packagings  
completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.
- remarks**  
please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## MgCl<sub>2</sub>

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 14: Transport information

- 14.1 UN number** not subject to transport regulations
- 14.2 UN proper shipping name** not relevant
- 14.3 transport hazard class(es)** none
- 14.4 packing group** not assigned to a packing group
- 14.5 environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 special precautions for user**  
there is no additional information.
- 14.7 transport in bulk according to Annex II of MARPOL and the IBC Code**  
the cargo is not intended to be carried in bulk.

#### Information for each of the UN Model Regulations

##### transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

not subject to ADR, RID and ADN.

##### International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

##### International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 Chemical Safety Assessment**  
chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code

## MgCl<sub>2</sub>

version number: GHS 1.0

date of compilation: 2020-05-26

abbr.	descriptions of used abbreviations
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## resuspension buffer

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

**resuspension buffer**

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

#### 2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This mixture does not contain any potentially hazardous products.



## resuspension buffer

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

##### general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

##### following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

##### following skin contact

wash with plenty of soap and water.

##### following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

##### following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

##### suitable extinguishing media

water spray, alcohol resistant foam, BC-powder, carbon dioxide (CO<sub>2</sub>)

##### unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

##### for non-emergency personnel

remove persons to safety.

##### for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

## resuspension buffer

version number: GHS 1.0

date of compilation: 2020-05-26

### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

### 6.4 reference to other sections

personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

### 7.3 specific end use(s)

see section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 control parameters

this information is not available.

### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

## resuspension buffer

version number: GHS 1.0

date of compilation: 2020-05-26

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available

##### solubility(ies)

- water solubility	miscible in any proportion
--------------------	----------------------------

## resuspension buffer

version number: GHS 1.0

date of compilation: 2020-05-26

partition coefficient

- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none

<b>9.2 other information</b>	there is no additional information
------------------------------	------------------------------------

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### classification according to GHS (1272/2008/EC, CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

## resuspension buffer

version number: GHS 1.0

date of compilation: 2020-05-26

- germ cell mutagenicity
  - shall not be classified as germ cell mutagenic.
- carcinogenicity
  - shall not be classified as carcinogenic.
- reproductive toxicity
  - shall not be classified as a reproductive toxicant.
- specific target organ toxicity - single exposure
  - shall not be classified as a specific target organ toxicant (single exposure).
- specific target organ toxicity - repeated exposure
  - shall not be classified as a specific target organ toxicant (repeated exposure).
- aspiration hazard
  - shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

- 12.1 toxicity**
  - shall not be classified as hazardous to the aquatic environment.
- 12.2 persistence and degradability**
  - data are not available.
- 12.3 bioaccumulative potential**
  - data are not available.
- 12.4 mobility in soil**
  - data are not available.
- 12.5 results of PBT and vPvB assessment**
  - data are not available.
- 12.6 other adverse effects**
  - data are not available.

### SECTION 13: Disposal considerations

- 13.1 waste treatment methods**
  - waste treatment-relevant information
    - recycling/reclamation of other inorganic materials.
  - sewage disposal-relevant information
    - do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.
  - waste treatment of containers/packagings
    - completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.
- remarks**
  - please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## resuspension buffer

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 14: Transport information

- 14.1 UN number** not subject to transport regulations
- 14.2 UN proper shipping name** not relevant
- 14.3 transport hazard class(es)** none
- 14.4 packing group** not assigned to a packing group
- 14.5 environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 special precautions for user**  
there is no additional information.
- 14.7 transport in bulk according to Annex II of MARPOL and the IBC Code**  
the cargo is not intended to be carried in bulk.

#### Information for each of the UN Model Regulations

##### transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

not subject to ADR, RID and ADN.

##### International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

##### International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 Chemical Safety Assessment**  
chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code

## resuspension buffer

version number: GHS 1.0

date of compilation: 2020-05-26

abbr.	descriptions of used abbreviations
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## Protease Inhibitor Mix

version number: GHS 2.0  
replaces version of: 2019-11-29 (GHS 1)

revision: 2020-02-28

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name	<b>Protease Inhibitor Mix</b>
registration number (REACH)	not relevant (mixture)
product code(s)	C12010010/C12010011/C12010012

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses	for research use only, not for use in diagnostic or therapeutic procedures.
--------------------------	---

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service	+32 4 364 20 50 this number is only available during the following of- fice hours: Mon-Fri 09:00 AM - 05:00 PM
-------------------------------	--

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)  
this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)  
not required

#### 2.3 other hazards

results of PBT and vPvB assessment  
this mixture does not contain any substances that are assessed to be a PBT or a vPvB.



## Protease Inhibitor Mix

version number: GHS 2.0  
replaces version of: 2019-11-29 (GHS 1)

revision: 2020-02-28

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

## Protease Inhibitor Mix

version number: GHS 2.0  
replaces version of: 2019-11-29 (GHS 1)

revision: 2020-02-28

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel  
remove persons to safety.

for emergency responders  
wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

#### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill  
covering of drains

advice on how to clean up a spill  
wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques  
use of adsorbent materials.

other information relating to spills and releases  
place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation  
use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

#### 7.2 conditions for safe storage, including any incompatibilities

#### 7.3 specific end use(s)

see section 16 for a general overview.

## Protease Inhibitor Mix

version number: GHS 2.0  
replaces version of: 2019-11-29 (GHS 1)

revision: 2020-02-28

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)

## Protease Inhibitor Mix

version number: GHS 2.0  
replaces version of: 2019-11-29 (GHS 1)

revision: 2020-02-28

explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined
partition coefficient	
- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
<b>9.2 other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

oxidisers

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

## Protease Inhibitor Mix

version number: GHS 2.0  
replaces version of: 2019-11-29 (GHS 1)

revision: 2020-02-28

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### classification according to GHS (1272/2008/EC, CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

shall not be classified as a specific target organ toxicant (single exposure).

specific target organ toxicity - repeated exposure

shall not be classified as a specific target organ toxicant (repeated exposure).

aspiration hazard

shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

#### 12.1 toxicity

shall not be classified as hazardous to the aquatic environment.

#### 12.2 persistence and degradability

data are not available.

#### 12.3 bioaccumulative potential

data are not available.

#### 12.4 mobility in soil

data are not available.

#### 12.5 results of PBT and vPvB assessment

data are not available.

## Protease Inhibitor Mix

version number: GHS 2.0  
replaces version of: 2019-11-29 (GHS 1)

revision: 2020-02-28

### 12.6 other adverse effects

data are not available.

## SECTION 13: Disposal considerations

### 13.1 waste treatment methods

sewage disposal-relevant information

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

#### remarks

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## SECTION 14: Transport information

- |      |  |   |
|------|--|---|
| 14.1 | UN number  | not subject to transport regulations                                  |
| 14.2 | UN proper shipping name  | not relevant  |
| 14.3 | transport hazard class(es)   | none  |
| 14.4 | packing group  | not assigned to a packing group                                       |
| 14.5 | environmental hazards  | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 | special precautions for user                                       | there is no additional information.                                   |
| 14.7 | transport in bulk according to Annex II of MARPOL and the IBC Code | the cargo is not intended to be carried in bulk.                      |

### Information for each of the UN Model Regulations

#### transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

not subject to ADR, RID and ADN.

#### International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

#### International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

## SECTION 15: Regulatory information

- 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture
- 15.2 Chemical Safety Assessment
- chemical safety assessments for substances in this mixture were not carried out.

## Protease Inhibitor Mix

version number: GHS 2.0  
replaces version of: 2019-11-29 (GHS 1)

revision: 2020-02-28

### SECTION 16: Other information

#### indication of changes (revised safety data sheet)

section	former entry (text/value)	actual entry (text/value)	safety-relevant
1.1	trade name: protease inhibitor cocktail	trade name: Protease Inhibitor Mix	yes
1.1	product code(s): C12010011	product code(s): C12010010/C12010011/C12010012	yes
2.3	other hazards: this material is combustible, but will not ignite readily.	other hazards	yes
3.2	mixtures	mixtures: description of the mixture	yes
9.1	initial boiling point and boiling range: 189 °C at 1,013 hPa	initial boiling point and boiling range: not determined	yes
9.1	flash point: 87 °C at 1,013 hPa	flash point: not determined	yes
9.1	explosive limits	explosive limits: not determined	yes
9.1	lower explosion limit (LEL): 2.6 vol%		yes
9.1	upper explosion limit (UEL): 28.5 vol%		yes
9.1	vapour pressure: 0.417 mmHg at 20 °C	vapour pressure: not determined	yes
9.1	auto-ignition temperature: 300 °C (auto-ignition temperature (liquids and gases))	auto-ignition temperature: not determined	yes
9.2	other information	other information: there is no additional information	yes
9.2	temperature class (EU, acc. to ATEX): T3 (maximum permissible surface temperature on the equipment: 200°C)		yes
14.3	transport hazard class(es): not assigned	transport hazard class(es): none	yes
14.4	packing group: not assigned	packing group: not assigned to a packing group	yes
14.7	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)		yes
14.7	identifier number: 9003		yes
14.7	proper shipping name: SUBSTANCES WITH A FLASH-POINT ABOVE 60 °C AND NOT MORE THAN 100 °C		yes
14.7	class: 9		yes
14.7	number of cones/blue lights: 0		yes

## Protease Inhibitor Mix

version number: GHS 2.0  
replaces version of: 2019-11-29 (GHS 1)

revision: 2020-02-28

section	former entry (text/value)	actual entry (text/value)	safety-relevant
14.7	transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN): not subject to ADR. not subject to RID.	transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN): not subject to ADR, RID and ADN.	yes

### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.



## 5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

5% BSA

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

#### 2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

## 5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

### 3.2 mixtures

#### SECTION 4: First aid measures

##### 4.1 description of first aid measures

###### general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

###### following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

###### following skin contact

wash with plenty of soap and water.

###### following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

###### following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

##### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

##### 4.3 indication of any immediate medical attention and special treatment needed

none

#### SECTION 5: Firefighting measures

##### 5.1 extinguishing media

###### suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

###### unsuitable extinguishing media

water jet

##### 5.2 special hazards arising from the substance or mixture

###### hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

##### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

#### SECTION 6: Accidental release measures

##### 6.1 personal precautions, protective equipment and emergency procedures

###### for non-emergency personnel

remove persons to safety.

###### for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

## 5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

### 7.3 specific end use(s)

see section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 control parameters

this information is not available.

### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

## 5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 information on basic physical and chemical properties

#### appearance

physical state	liquid
colour	whitish yellow
odour	odourless

#### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined

partition coefficient

- n-octanol/water (log KOW)	this information is not available
-----------------------------	-----------------------------------

## 5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
<b>9.2 other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

oxidisers

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### classification according to GHS (1272/2008/EC, CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

## 5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

**carcinogenicity**

shall not be classified as carcinogenic.

**reproductive toxicity**

shall not be classified as a reproductive toxicant.

**specific target organ toxicity - single exposure**

shall not be classified as a specific target organ toxicant (single exposure).

**specific target organ toxicity - repeated exposure**

shall not be classified as a specific target organ toxicant (repeated exposure).

**aspiration hazard**

shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

**12.1 toxicity**

shall not be classified as hazardous to the aquatic environment.

**12.2 persistence and degradability**

data are not available.

**12.3 bioaccumulative potential**

data are not available.

**12.4 mobility in soil**

data are not available.

**12.5 results of PBT and vPvB assessment**

data are not available.

**12.6 other adverse effects**

data are not available.

### SECTION 13: Disposal considerations

**13.1 waste treatment methods**

**sewage disposal-relevant information**

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

**waste treatment of containers/packagings**

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

**remarks**

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## 5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

### SECTION 14: Transport information

- 14.1 UN number** not subject to transport regulations
- 14.2 UN proper shipping name** not relevant
- 14.3 transport hazard class(es)** none
- 14.4 packing group** not assigned to a packing group
- 14.5 environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 special precautions for user**  
there is no additional information.
- 14.7 transport in bulk according to Annex II of MARPOL and the IBC Code**  
the cargo is not intended to be carried in bulk.

#### Information for each of the UN Model Regulations

##### transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

not subject to ADR, RID and ADN.

##### International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

##### International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 Chemical Safety Assessment**  
chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code

## 5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

abbr.	descriptions of used abbreviations
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.



## rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name	<b>rabbit IgG</b>
registration number (REACH)	not relevant (mixture)
product code(s)	C15410206

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses	for research use only, not for use in diagnostic or therapeutic procedures.
--------------------------	---

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service	+32 4 364 20 50 this number is only available during the following of- fice hours: Mon-Fri 09:00 AM - 05:00 PM
-------------------------------	--

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)  
this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)  
not required

#### 2.3 other hazards

results of PBT and vPvB assessment  
this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO<sub>x</sub>)

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

## **rabbit IgG**

version number: GHS 1.0

date of compilation: 2019-12-02

### **SECTION 6: Accidental release measures**

#### **6.1 personal precautions, protective equipment and emergency procedures**

for non-emergency personnel

remove persons to safety.

for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### **6.2 environmental precautions**

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

#### **6.3 methods and material for containment and cleaning up**

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

#### **6.4 reference to other sections**

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

### **SECTION 7: Handling and storage**

#### **7.1 precautions for safe handling**

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

#### **7.2 conditions for safe storage, including any incompatibilities**

control of effects

protect against external exposure, such as

frost

#### **7.3 specific end use(s)**

see section 16 for a general overview.

## rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

occupational exposure limit values (Workplace Exposure Limits)											
country	name of agent	CAS No	identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Ceiling-C [ppm]	Ceiling-C [mg/m <sup>3</sup> ]	notation	source
GB	sucrose	57-50-1	WEL		10		20				EH40/2005

notation

Ceiling-C

STEL

TWA

ceiling value is a limit value above which exposure should not occur

short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

#### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

## rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined

### partition coefficient

- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none

9.2

### other information

there is no additional information

## SECTION 10: Stability and reactivity

### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3 possibility of hazardous reactions

no known hazardous reactions.

### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

### 10.5 incompatible materials

there is no additional information.

## **rabbit IgG**

version number: GHS 1.0

date of compilation: 2019-12-02

### **10.6 hazardous decomposition products**

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

## **SECTION 11: Toxicological information**

### **11.1 information on toxicological effects**

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### **classification according to GHS (1272/2008/EC, CLP)**

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

shall not be classified as a specific target organ toxicant (single exposure).

specific target organ toxicity - repeated exposure

shall not be classified as a specific target organ toxicant (repeated exposure).

aspiration hazard

shall not be classified as presenting an aspiration hazard.

## **SECTION 12: Ecological information**

### **12.1 toxicity**

shall not be classified as hazardous to the aquatic environment.

### **12.2 persistence and degradability**

data are not available.

### **12.3 bioaccumulative potential**

data are not available.

### **12.4 mobility in soil**

data are not available.

## rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

### 12.5 results of PBT and vPvB assessment

data are not available.

### 12.6 other adverse effects

data are not available.

## SECTION 13: Disposal considerations

### 13.1 waste treatment methods

sewage disposal-relevant information

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

#### remarks

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## SECTION 14: Transport information

- |      |  |   |
|------|--|---|
| 14.1 | UN number  | not subject to transport regulations                                  |
| 14.2 | UN proper shipping name  | not relevant  |
| 14.3 | transport hazard class(es)   | none  |
| 14.4 | packing group  | not assigned to a packing group                                       |
| 14.5 | environmental hazards  | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 | special precautions for user                                       | there is no additional information.                                   |
| 14.7 | transport in bulk according to Annex II of MARPOL and the IBC Code | the cargo is not intended to be carried in bulk.                      |

### Information for each of the UN Model Regulations

#### transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

not subject to ADR, RID and ADN.

#### International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

#### International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

## rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 15: Regulatory information

#### 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.2 Chemical Safety Assessment

chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
EH40/2005	EH40/2005 Workplace exposure limits ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> )
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

#### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).



## **rabbit IgG**

version number: GHS 1.0

date of compilation: 2019-12-02

---

### **disclaimer**

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## H3K4me3 polyclonal antibody

Version number: GHS 1.0

Date of compilation: 2019-11-14

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Trade name	<b>H3K4me3 polyclonal antibody</b>
Registration number (REACH)	not relevant (mixture)
Product code(s)	C15410003

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	For research use only, not for use in diagnostic or therapeutic procedures.
--------------------------	---

#### 1.3 Details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

Telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 Emergency telephone number

Emergency information service	+32 4 364 20 50 This number is only available during the following office hours: Mon-Fri 09:00 AM - 05:00 PM
-------------------------------	---

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Section	Hazard class	Category	Hazard class and category	Hazard statement
3.4S	skin sensitisation	1	Skin Sens. 1	H317

For full text of abbreviations: see SECTION 16.

#### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

- Signal word warning

- Pictograms

GHS07



- Hazard statements

H317 May cause an allergic skin reaction.

- Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P321	Specific treatment (see on this label).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to industrial combustion plant.

## H3K4me3 polyclonal antibody

Version number: GHS 1.0

Date of compilation: 2019-11-14

- Hazardous ingredients for labelling proclin 300

### 2.3 Other hazards

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.


## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not relevant (mixture)

### 3.2 Mixtures

This product is composed of antibodies in aqueous buffer solution. It contains 0.05% sodium azide and 0,05% ProClin™ 300 as preservative.

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
proclin 300	CAS No 55965-84-9  Index No 613-167-00-5  REACH Reg. No 01-2120764691-48-xxxx	0.05	Acute Tox. 3 / H301 Acute Tox. 3 / H311 Acute Tox. 3 / H331 Skin Corr. 1B / H314 Eye Dam. 1 / H318 Skin Sens. 1 / H317 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	

For full text of abbreviations: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

### 4.3 Indication of any immediate medical attention and special treatment needed

none

## H3K4me3 polyclonal antibody

Version number: GHS 1.0

Date of compilation: 2019-11-14

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO<sub>2</sub>)

Unsuitable extinguishing media

Water jet

#### 5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Nitrogen oxides (NO<sub>x</sub>)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

#### 6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## H3K4me3 polyclonal antibody

Version number: GHS 1.0

Date of compilation: 2019-11-14

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation
- Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

#### 7.2 Conditions for safe storage, including any incompatibilities

Control of effects

Protect against external exposure, such as  
Frost

#### 7.3 Specific end use(s)

See section 16 for a general overview.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

This information is not available.

Relevant DNELs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
proclin 300	55965-84-9	DNEL	0.02 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - local effects
proclin 300	55965-84-9	DNEL	0.04 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - local effects

Relevant PNECs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
proclin 300	55965-84-9	PNEC	3.39 µg/l	aquatic organisms	freshwater	short-term (single instance)
proclin 300	55965-84-9	PNEC	3.39 µg/l	aquatic organisms	marine water	short-term (single instance)
proclin 300	55965-84-9	PNEC	0.23 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
proclin 300	55965-84-9	PNEC	0.027 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
proclin 300	55965-84-9	PNEC	0.027 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
proclin 300	55965-84-9	PNEC	0.01 mg/kg	terrestrial organisms	soil	short-term (single instance)

## H3K4me3 polyclonal antibody

Version number: GHS 1.0

Date of compilation: 2019-11-14

### 8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical state	liquid
Colour	colourless
Odour	odourless

#### Other safety parameters

pH (value)	not determined
Melting point/freezing point	not determined
Initial boiling point and boiling range	not determined
Flash point	not determined
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Explosive limits	not determined
Vapour pressure	not determined
Density	1 g/cm <sup>3</sup> at 20 °C

## H3K4me3 polyclonal antibody

Version number: GHS 1.0

Date of compilation: 2019-11-14

Vapour density	this information is not available
Solubility(ies)	not determined
Partition coefficient	
- n-octanol/water (log KOW)	this information is not available
Auto-ignition temperature	not determined
Viscosity	not determined
Explosive properties	none
Oxidising properties	none
<b>9.2 Other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 Chemical stability

See below "Conditions to avoid".

#### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

#### 10.5 Incompatible materials

There is no additional information.

#### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

##### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### Classification according to GHS (1272/2008/EC, CLP)

##### Acute toxicity

Shall not be classified as acutely toxic.

##### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

## H3K4me3 polyclonal antibody

Version number: GHS 1.0

Date of compilation: 2019-11-14

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

#### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

#### 12.2 Persistence and degradability

Data are not available.

#### 12.3 Bioaccumulative potential

Data are not available.

#### 12.4 Mobility in soil

Data are not available.

#### 12.5 Results of PBT and vPvB assessment

Data are not available.

#### 12.6 Other adverse effects

Data are not available.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.



## H3K4me3 polyclonal antibody

Version number: GHS 1.0

Date of compilation: 2019-11-14

### SECTION 14: Transport information

- 14.1 UN number** not subject to transport regulations
- 14.2 UN proper shipping name** not relevant
- 14.3 Transport hazard class(es)** not assigned
- 14.4 Packing group** not assigned
- 14.5 Environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 Special precautions for user**  
There is no additional information.
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**  
The cargo is not intended to be carried in bulk.

#### Information for each of the UN Model Regulations

##### Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

Not subject to ADR. Not subject to RID.

##### European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)

Identifier number 9006

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Class 9

Number of cones/blue lights 0

##### International Maritime Dangerous Goods Code (IMDG)

Not subject to IMDG.

##### International Civil Aviation Organization (ICAO-IATA/DGR)

Not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 Chemical Safety Assessment**  
Chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

## H3K4me3 polyclonal antibody

Version number: GHS 1.0

Date of compilation: 2019-11-14

Abbr.	Descriptions of used abbreviations
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitisation
vPvB	Very Persistent and very Bioaccumulative

### Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

## H3K4me3 polyclonal antibody

Version number: GHS 1.0

Date of compilation: 2019-11-14

### List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

## ChIP-seq grade GAPDH TSS primer pair

version number: GHS 3.0  
replaces version of: 2019-12-12 (GHS 2)

revision: 2019-12-12

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name	<b>ChIP-seq grade GAPDH TSS primer pair</b>
registration number (REACH)	not relevant (mixture)
product code(s)	C17011047

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses	for research use only, not for use in diagnostic or therapeutic procedures.
--------------------------	---

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service	+32 4 364 20 50 this number is only available during the following of- fice hours: Mon-Fri 09:00 AM - 05:00 PM
-------------------------------	--

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)  
this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)  
not required

#### 2.3 other hazards

results of PBT and vPvB assessment  
this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## ChIP-seq grade GAPDH TSS primer pair

version number: GHS 3.0  
replaces version of: 2019-12-12 (GHS 2)

revision: 2019-12-12

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This product is composed of synthetic DNA oligonucleotides in an aqueous buffer solution. It does not contain any hazardous ingredients. This mixture does not contain any potentially hazardous products.

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

## ChIP-seq grade GAPDH TSS primer pair

version number: GHS 3.0  
replaces version of: 2019-12-12 (GHS 2)

revision: 2019-12-12

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel  
remove persons to safety.

for emergency responders  
wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

#### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill  
covering of drains

advice on how to clean up a spill  
wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques  
use of adsorbent materials.

other information relating to spills and releases  
place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation  
use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

#### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as  
frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

## ChIP-seq grade GAPDH TSS primer pair

version number: GHS 3.0  
replaces version of: 2019-12-12 (GHS 2)

revision: 2019-12-12

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)

## ChIP-seq grade GAPDH TSS primer pair

version number: GHS 3.0  
replaces version of: 2019-12-12 (GHS 2)

revision: 2019-12-12

explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined
partition coefficient	
- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
<b>9.2 other information</b>	there is no additional information

## SECTION 10: Stability and reactivity

### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3 possibility of hazardous reactions

no known hazardous reactions.

### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

### 10.5 incompatible materials

there is no additional information.

### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.



## ChIP-seq grade GAPDH TSS primer pair

version number: GHS 3.0  
replaces version of: 2019-12-12 (GHS 2)

revision: 2019-12-12

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### classification according to GHS (1272/2008/EC, CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

shall not be classified as a specific target organ toxicant (single exposure).

specific target organ toxicity - repeated exposure

shall not be classified as a specific target organ toxicant (repeated exposure).

aspiration hazard

shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

#### 12.1 toxicity

shall not be classified as hazardous to the aquatic environment.

#### 12.2 persistence and degradability

data are not available.

#### 12.3 bioaccumulative potential

data are not available.

#### 12.4 mobility in soil

data are not available.

#### 12.5 results of PBT and vPvB assessment

data are not available.

## ChIP-seq grade GAPDH TSS primer pair

version number: GHS 3.0  
replaces version of: 2019-12-12 (GHS 2)

revision: 2019-12-12

### 12.6 other adverse effects

data are not available.

## SECTION 13: Disposal considerations

### 13.1 waste treatment methods

sewage disposal-relevant information

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

#### remarks

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## SECTION 14: Transport information

- |  |   |
|--|---|
| <b>14.1 UN number</b>  | not subject to transport regulations                                  |
| <b>14.2 UN proper shipping name</b>  | not relevant  |
| <b>14.3 transport hazard class(es)</b>   | none  |
| <b>14.4 packing group</b>  | not assigned to a packing group                                       |
| <b>14.5 environmental hazards</b>  | non-environmentally hazardous acc. to the dangerous goods regulations |
| <b>14.6 special precautions for user</b>                                       | there is no additional information.                                   |
| <b>14.7 transport in bulk according to Annex II of MARPOL and the IBC Code</b> | the cargo is not intended to be carried in bulk.                      |

### Information for each of the UN Model Regulations

#### **transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

not subject to ADR, RID and ADN.

#### **International Maritime Dangerous Goods Code (IMDG)**

not subject to IMDG.

#### **International Civil Aviation Organization (ICAO-IATA/DGR)**

not subject to ICAO-IATA.

## SECTION 15: Regulatory information

- 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 Chemical Safety Assessment**  
chemical safety assessments for substances in this mixture were not carried out.

## ChIP-seq grade GAPDH TSS primer pair

version number: GHS 3.0  
replaces version of: 2019-12-12 (GHS 2)

revision: 2019-12-12

### SECTION 16: Other information

#### indication of changes (revised safety data sheet)

section	former entry (text/value)	actual entry (text/value)	safety-rel- evant
1.1		product code(s): C17011047	yes

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

#### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## ChIP-seq grade Myoglobin exon 2 primer pair

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

**ChIP-seq grade Myoglobin exon 2 primer pair**

registration number (REACH)

not relevant (mixture)

product code(s)

C17011006

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50

e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50

this number is only available during the following office hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

#### 2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## ChIP-seq grade Myoglobin exon 2 primer pair

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This product is composed of synthetic DNA oligonucleotides in an aqueous buffer solution. It does not contain any hazardous ingredients.

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

## ChIP-seq grade Myoglobin exon 2 primer pair

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

#### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

#### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

## ChIP-seq grade Myoglobin exon 2 primer pair

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls  
general ventilation.

individual protection measures (personal protective equipment)

eye/face protection  
wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined

## ChIP-seq grade Myoglobin exon 2 primer pair

version number: GHS 1.0

date of compilation: 2019-12-02

vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined
partition coefficient	
- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
<b>9.2 other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

##### classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### classification according to GHS (1272/2008/EC, CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.



## ChIP-seq grade Myoglobin exon 2 primer pair

version number: GHS 1.0

date of compilation: 2019-12-02

**acute toxicity**

shall not be classified as acutely toxic.

**skin corrosion/irritation**

shall not be classified as corrosive/irritant to skin.

**serious eye damage/eye irritation**

shall not be classified as seriously damaging to the eye or eye irritant.

**respiratory or skin sensitisation**

shall not be classified as a respiratory or skin sensitiser.

**germ cell mutagenicity**

shall not be classified as germ cell mutagenic.

**carcinogenicity**

shall not be classified as carcinogenic.

**reproductive toxicity**

shall not be classified as a reproductive toxicant.

**specific target organ toxicity - single exposure**

shall not be classified as a specific target organ toxicant (single exposure).

**specific target organ toxicity - repeated exposure**

shall not be classified as a specific target organ toxicant (repeated exposure).

**aspiration hazard**

shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

**12.1 toxicity**

shall not be classified as hazardous to the aquatic environment.

**12.2 persistence and degradability**

data are not available.

**12.3 bioaccumulative potential**

data are not available.

**12.4 mobility in soil**

data are not available.

**12.5 results of PBT and vPvB assessment**

data are not available.

**12.6 other adverse effects**

data are not available.

## ChIP-seq grade Myoglobin exon 2 primer pair

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 13: Disposal considerations

#### 13.1 waste treatment methods

sewage disposal-relevant information

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

#### remarks

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

- |      |  |   |
|------|--|---|
| 14.1 | UN number  | not subject to transport regulations                                  |
| 14.2 | UN proper shipping name  | not relevant  |
| 14.3 | transport hazard class(es)   | none  |
| 14.4 | packing group  | not assigned to a packing group                                       |
| 14.5 | environmental hazards  | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 | special precautions for user                                       | there is no additional information.                                   |
| 14.7 | transport in bulk according to Annex II of MARPOL and the IBC Code | the cargo is not intended to be carried in bulk.                      |

#### Information for each of the UN Model Regulations

##### **transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

not subject to ADR, RID and ADN.

##### **International Maritime Dangerous Goods Code (IMDG)**

not subject to IMDG.

##### **International Civil Aviation Organization (ICAO-IATA/DGR)**

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 **safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 **Chemical Safety Assessment**  
chemical safety assessments for substances in this mixture were not carried out.

## ChIP-seq grade Myoglobin exon 2 primer pair

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

#### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## Tagmentation enzyme

version number: GHS 1.0

date of compilation: 2020-06-09

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

**Tagmentation enzyme**

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

#### 2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This mixture does not contain any potentially hazardous products.

## Tagmentation enzyme

version number: GHS 1.0

date of compilation: 2020-06-09

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

##### general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

##### following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

##### following skin contact

wash with plenty of soap and water.

##### following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

##### following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

##### suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

##### unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

##### hazardous combustion products

nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

##### for non-emergency personnel

remove persons to safety.

##### for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

## Tagmentation enzyme

version number: GHS 1.0

date of compilation: 2020-06-09

### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

### 7.3 specific end use(s)

see section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 control parameters

occupational exposure limit values (Workplace Exposure Limits)											
country	name of agent	CAS No	identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Ceiling-C [ppm]	Ceiling-C [mg/m <sup>3</sup> ]	notation	source
GB	glycerol	56-81-5	WEL		10					mist	EH40/2005

notation

Ceiling-C

mist

STEL

TWA

ceiling value is a limit value above which exposure should not occur

as mists

short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

## Tagmentation enzyme

version number: GHS 1.0

date of compilation: 2020-06-09

### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 information on basic physical and chemical properties

#### appearance

physical state	liquid
colour	colourless
odour	characteristic

#### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	not determined

## Tagmentation enzyme

version number: GHS 1.0

date of compilation: 2020-06-09

vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined
partition coefficient	
- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
<b>9.2 other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

oxidisers

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

##### classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### classification according to GHS (1272/2008/EC, CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

##### acute toxicity

shall not be classified as acutely toxic.



## Tagmentation enzyme

version number: GHS 1.0

date of compilation: 2020-06-09

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

shall not be classified as a specific target organ toxicant (single exposure).

specific target organ toxicity - repeated exposure

shall not be classified as a specific target organ toxicant (repeated exposure).

aspiration hazard

shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

#### 12.1 toxicity

shall not be classified as hazardous to the aquatic environment.

#### 12.2 persistence and degradability

data are not available.

#### 12.3 bioaccumulative potential

data are not available.

#### 12.4 mobility in soil

data are not available.

#### 12.5 results of PBT and vPvB assessment

data are not available.

#### 12.6 other adverse effects

data are not available.

### SECTION 13: Disposal considerations

#### 13.1 waste treatment methods

sewage disposal-relevant information

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

## Tagmentation enzyme

version number: GHS 1.0

date of compilation: 2020-06-09

### remarks

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

- 14.1 UN number** not subject to transport regulations
- 14.2 UN proper shipping name** not relevant
- 14.3 transport hazard class(es)** none
- 14.4 packing group** not assigned to a packing group
- 14.5 environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 special precautions for user**  
there is no additional information.
- 14.7 transport in bulk according to Annex II of MARPOL and the IBC Code**  
the cargo is not intended to be carried in bulk.

### Information for each of the UN Model Regulations

#### **transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

not subject to ADR, RID and ADN.

#### **International Maritime Dangerous Goods Code (IMDG)**

not subject to IMDG.

#### **International Civil Aviation Organization (ICAO-IATA/DGR)**

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 Chemical Safety Assessment**  
chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### **abbreviations and acronyms**

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)

## Tagmentation enzyme

version number: GHS 1.0

date of compilation: 2020-06-09

abbr.	descriptions of used abbreviations
EH40/2005	EH40/2005 Workplace exposure limits ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> )
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## 2x High-Fidelity Mastermix

version number: GHS 1.0

date of compilation: 2020-06-18

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

**2x High-Fidelity Mastermix**

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK, Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

#### 2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## 2x High-Fidelity Mastermix

version number: GHS 1.0

date of compilation: 2020-06-18

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

## 2x High-Fidelity Mastermix

version number: GHS 1.0

date of compilation: 2020-06-18

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

#### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

#### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

## 2x High-Fidelity Mastermix

version number: GHS 1.0

date of compilation: 2020-06-18

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	characteristic

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined

## 2x High-Fidelity Mastermix

version number: GHS 1.0

date of compilation: 2020-06-18

vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined
partition coefficient	
- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
<b>9.2 other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

oxidisers

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### classification according to GHS (1272/2008/EC, CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.



## 2x High-Fidelity Mastermix

version number: GHS 1.0

date of compilation: 2020-06-18

- acute toxicity
  - shall not be classified as acutely toxic.
- skin corrosion/irritation
  - shall not be classified as corrosive/irritant to skin.
- serious eye damage/eye irritation
  - shall not be classified as seriously damaging to the eye or eye irritant.
- respiratory or skin sensitisation
  - shall not be classified as a respiratory or skin sensitiser.
- germ cell mutagenicity
  - shall not be classified as germ cell mutagenic.
- carcinogenicity
  - shall not be classified as carcinogenic.
- reproductive toxicity
  - shall not be classified as a reproductive toxicant.
- specific target organ toxicity - single exposure
  - shall not be classified as a specific target organ toxicant (single exposure).
- specific target organ toxicity - repeated exposure
  - shall not be classified as a specific target organ toxicant (repeated exposure).
- aspiration hazard
  - shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

- 12.1 toxicity**
  - shall not be classified as hazardous to the aquatic environment.
- 12.2 persistence and degradability**
  - data are not available.
- 12.3 bioaccumulative potential**
  - data are not available.
- 12.4 mobility in soil**
  - data are not available.
- 12.5 results of PBT and vPvB assessment**
  - data are not available.
- 12.6 other adverse effects**
  - data are not available.

## 2x High-Fidelity Mastermix

version number: GHS 1.0

date of compilation: 2020-06-18

### SECTION 13: Disposal considerations

#### 13.1 waste treatment methods

sewage disposal-relevant information

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

#### remarks

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

- |      |  |   |
|------|--|---|
| 14.1 | UN number  | not subject to transport regulations                                  |
| 14.2 | UN proper shipping name  | not relevant  |
| 14.3 | transport hazard class(es)   | none  |
| 14.4 | packing group  | not assigned to a packing group                                       |
| 14.5 | environmental hazards  | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 | special precautions for user                                       | there is no additional information.                                   |
| 14.7 | transport in bulk according to Annex II of MARPOL and the IBC Code | the cargo is not intended to be carried in bulk.                      |

#### Information for each of the UN Model Regulations

##### **transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

not subject to ADR, RID and ADN.

##### **International Maritime Dangerous Goods Code (IMDG)**

not subject to IMDG.

##### **International Civil Aviation Organization (ICAO-IATA/DGR)**

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 **safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 **Chemical Safety Assessment**  
chemical safety assessments for substances in this mixture were not carried out.

## 2x High-Fidelity Mastermix

version number: GHS 1.0

date of compilation: 2020-06-18

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

#### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## 100x SYBR

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

**100x SYBR**

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

#### 2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This mixture does not contain any potentially hazardous products.

## 100x SYBR

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

##### general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

##### following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

##### following skin contact

wash with plenty of soap and water.

##### following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

##### following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

##### suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

##### unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

##### hazardous combustion products

nitrogen oxides (NO<sub>x</sub>)

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

##### for non-emergency personnel

remove persons to safety.

##### for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

## 100x SYBR

version number: GHS 1.0

date of compilation: 2020-05-26

### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

### 6.4 reference to other sections

hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

### 7.3 specific end use(s)

see section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 control parameters

this information is not available.

### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

## 100x SYBR

version number: GHS 1.0

date of compilation: 2020-05-26

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/ impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	orange
odour	characteristic

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined

partition coefficient

- n-octanol/water (log KOW)	this information is not available
-----------------------------	-----------------------------------

## 100x SYBR

version number: GHS 1.0

date of compilation: 2020-05-26

auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
<b>9.2 other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

##### classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### classification according to GHS (1272/2008/EC, CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

##### acute toxicity

shall not be classified as acutely toxic.

##### skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

##### serious eye damage/eye irritation

shall not be classified as seriously damaging to the eye or eye irritant.

##### respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

##### germ cell mutagenicity

shall not be classified as germ cell mutagenic.



## 100x SYBR

version number: GHS 1.0

date of compilation: 2020-05-26

**carcinogenicity**

shall not be classified as carcinogenic.

**reproductive toxicity**

shall not be classified as a reproductive toxicant.

**specific target organ toxicity - single exposure**

shall not be classified as a specific target organ toxicant (single exposure).

**specific target organ toxicity - repeated exposure**

shall not be classified as a specific target organ toxicant (repeated exposure).

**aspiration hazard**

shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

**12.1 toxicity**

shall not be classified as hazardous to the aquatic environment.

**12.2 persistence and degradability**

data are not available.

**12.3 bioaccumulative potential**

data are not available.

**12.4 mobility in soil**

data are not available.

**12.5 results of PBT and vPvB assessment**

data are not available.

**12.6 other adverse effects**

data are not available.

### SECTION 13: Disposal considerations

**13.1 waste treatment methods**

**sewage disposal-relevant information**

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

**waste treatment of containers/packages**

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

**remarks**

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## 100x SYBR

version number: GHS 1.0

date of compilation: 2020-05-26

### SECTION 14: Transport information

- 14.1 UN number** not subject to transport regulations
- 14.2 UN proper shipping name** not relevant
- 14.3 transport hazard class(es)** none
- 14.4 packing group** not assigned to a packing group
- 14.5 environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 special precautions for user**  
there is no additional information.
- 14.7 transport in bulk according to Annex II of MARPOL and the IBC Code**  
the cargo is not intended to be carried in bulk.

#### Information for each of the UN Model Regulations

##### transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

not subject to ADR, RID and ADN.

##### International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

##### International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 Chemical Safety Assessment**  
chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code

## 100x SYBR

version number: GHS 1.0

date of compilation: 2020-05-26

abbr.	descriptions of used abbreviations
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## universal primer

version number: GHS 1.0

date of compilation: 2020-06-22

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name	<b>universal primer</b>
registration number (REACH)	not relevant (mixture)
product code(s)	K13621004

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses	for research use only, not for use in diagnostic or therapeutic procedures.
--------------------------	---

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK, Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service	+32 4 364 20 50 this number is only available during the following of- fice hours: Mon-Fri 09:00 AM - 05:00 PM
-------------------------------	--

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)  
this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)  
not required

#### 2.3 other hazards

results of PBT and vPvB assessment  
this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## universal primer

version number: GHS 1.0

date of compilation: 2020-06-22

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This product is composed of synthetic DNA oligonucleotides in an aqueous buffer solution. It does not contain any hazardous ingredients.

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

## universal primer

version number: GHS 1.0

date of compilation: 2020-06-22

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

#### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

#### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

## universal primer

version number: GHS 1.0

date of compilation: 2020-06-22

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined

## universal primer

version number: GHS 1.0

date of compilation: 2020-06-22

vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined
partition coefficient	
- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
<b>9.2 other information</b>	there is no additional information

## SECTION 10: Stability and reactivity

### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3 possibility of hazardous reactions

no known hazardous reactions.

### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

### 10.5 incompatible materials

there is no additional information.

### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 information on toxicological effects

test data are not available for the complete mixture.

#### classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### classification according to GHS (1272/2008/EC, CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.



## universal primer

version number: GHS 1.0

date of compilation: 2020-06-22

- acute toxicity
  - shall not be classified as acutely toxic.
- skin corrosion/irritation
  - shall not be classified as corrosive/irritant to skin.
- serious eye damage/eye irritation
  - shall not be classified as seriously damaging to the eye or eye irritant.
- respiratory or skin sensitisation
  - shall not be classified as a respiratory or skin sensitiser.
- germ cell mutagenicity
  - shall not be classified as germ cell mutagenic.
- carcinogenicity
  - shall not be classified as carcinogenic.
- reproductive toxicity
  - shall not be classified as a reproductive toxicant.
- specific target organ toxicity - single exposure
  - shall not be classified as a specific target organ toxicant (single exposure).
- specific target organ toxicity - repeated exposure
  - shall not be classified as a specific target organ toxicant (repeated exposure).
- aspiration hazard
  - shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

- 12.1 toxicity**
  - shall not be classified as hazardous to the aquatic environment.
- 12.2 persistence and degradability**
  - data are not available.
- 12.3 bioaccumulative potential**
  - data are not available.
- 12.4 mobility in soil**
  - data are not available.
- 12.5 results of PBT and vPvB assessment**
  - data are not available.
- 12.6 other adverse effects**
  - data are not available.

## universal primer

version number: GHS 1.0

date of compilation: 2020-06-22

### SECTION 13: Disposal considerations

#### 13.1 waste treatment methods

sewage disposal-relevant information

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

#### remarks

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

- |      |  |   |
|------|--|---|
| 14.1 | UN number  | not subject to transport regulations                                  |
| 14.2 | UN proper shipping name  | not relevant  |
| 14.3 | transport hazard class(es)   | none  |
| 14.4 | packing group  | not assigned to a packing group                                       |
| 14.5 | environmental hazards  | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 | special precautions for user                                       | there is no additional information.                                   |
| 14.7 | transport in bulk according to Annex II of MARPOL and the IBC Code | the cargo is not intended to be carried in bulk.                      |

#### Information for each of the UN Model Regulations

##### **transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

not subject to ADR, RID and ADN.

##### **International Maritime Dangerous Goods Code (IMDG)**

not subject to IMDG.

##### **International Civil Aviation Organization (ICAO-IATA/DGR)**

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 **safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 **Chemical Safety Assessment**  
chemical safety assessments for substances in this mixture were not carried out.

## universal primer

version number: GHS 1.0

date of compilation: 2020-06-22

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

#### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.

## Primer index 1-24

version number: GHS 1.0

date of compilation: 2020-06-22

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 product identifier

trade name

**Primer index 1-24**

registration number (REACH)

not relevant (mixture)

#### 1.2 relevant identified uses of the substance or mixture and uses advised against

relevant identified uses

for research use only, not for use in diagnostic or therapeutic procedures.

#### 1.3 details of the supplier of the safety data sheet

Diagenode SA  
LIEGE SCIENCE PARK, Rue du Bois Saint-Jean, 3  
4102 Seraing  
Belgium

telephone: +32 4 364 20 50  
e-mail: info@diagenode.com

#### 1.4 emergency telephone number

emergency information service

+32 4 364 20 50  
this number is only available during the following of-  
fice hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

classification according to Regulation (EC) No 1272/2008 (CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 label elements

labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

#### 2.3 other hazards

results of PBT and vPvB assessment

this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## Primer index 1-24

version number: GHS 1.0

date of compilation: 2020-06-22

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This product is composed of synthetic DNA oligonucleotides in an aqueous buffer solution. It does not contain any hazardous ingredients.

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

do not leave affected person unattended. remove victim out of the danger area. keep affected person warm, still and covered. take off immediately all contaminated clothing. in all cases of doubt, or when symptoms persist, seek medical advice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

if breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. provide fresh air.

following skin contact

wash with plenty of soap and water.

following eye contact

remove contact lenses, if present and easy to do. Continue rinsing. irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

following ingestion

rinse mouth with water (only if the person is conscious). do NOT induce vomiting.

#### 4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

#### 4.3 indication of any immediate medical attention and special treatment needed

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

#### 5.2 special hazards arising from the substance or mixture

#### 5.3 advice for firefighters

in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.

## Primer index 1-24

version number: GHS 1.0

date of compilation: 2020-06-22

### SECTION 6: Accidental release measures

#### 6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.

#### 6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

- measures to prevent fire as well as aerosol and dust generation

use local and general ventilation. use only in well-ventilated areas.

advice on general occupational hygiene

wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

#### 7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

## Primer index 1-24

version number: GHS 1.0

date of compilation: 2020-06-22

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

wear suitable gloves. chemical protection gloves are suitable, which are tested according to EN 374. check leak-tightness/impermeability prior to use. in the case of wanting to use the gloves again, clean them before taking off and air them well. for special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- other protection measures

take recovery periods for skin regeneration. preventive skin protection (barrier creams/ointments) is recommended. wash hands thoroughly after handling.

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

use appropriate container to avoid environmental contamination. keep away from drains, surface and ground water.

### SECTION 9: Physical and chemical properties

#### 9.1 information on basic physical and chemical properties

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

pH (value)	not determined
melting point/freezing point	not determined
initial boiling point and boiling range	not determined
flash point	not determined
evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined

## Primer index 1-24

version number: GHS 1.0

date of compilation: 2020-06-22

vapour pressure	not determined
density	not determined
vapour density	this information is not available
relative density	information on this property is not available
solubility(ies)	not determined
partition coefficient	
- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
<b>9.2 other information</b>	there is no additional information

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability

the material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

there are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

##### classification procedure

the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### classification according to GHS (1272/2008/EC, CLP)

this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.



## Primer index 1-24

version number: GHS 1.0

date of compilation: 2020-06-22

- acute toxicity
  - shall not be classified as acutely toxic.
- skin corrosion/irritation
  - shall not be classified as corrosive/irritant to skin.
- serious eye damage/eye irritation
  - shall not be classified as seriously damaging to the eye or eye irritant.
- respiratory or skin sensitisation
  - shall not be classified as a respiratory or skin sensitiser.
- germ cell mutagenicity
  - shall not be classified as germ cell mutagenic.
- carcinogenicity
  - shall not be classified as carcinogenic.
- reproductive toxicity
  - shall not be classified as a reproductive toxicant.
- specific target organ toxicity - single exposure
  - shall not be classified as a specific target organ toxicant (single exposure).
- specific target organ toxicity - repeated exposure
  - shall not be classified as a specific target organ toxicant (repeated exposure).
- aspiration hazard
  - shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

- 12.1 toxicity**
  - shall not be classified as hazardous to the aquatic environment.
- 12.2 persistence and degradability**
  - data are not available.
- 12.3 bioaccumulative potential**
  - data are not available.
- 12.4 mobility in soil**
  - data are not available.
- 12.5 results of PBT and vPvB assessment**
  - data are not available.
- 12.6 other adverse effects**
  - data are not available.

## Primer index 1-24

version number: GHS 1.0

date of compilation: 2020-06-22

### SECTION 13: Disposal considerations

#### 13.1 waste treatment methods

sewage disposal-relevant information

do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings

completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

#### remarks

please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

- |      |  |   |
|------|--|---|
| 14.1 | UN number  | not subject to transport regulations                                  |
| 14.2 | UN proper shipping name  | not relevant  |
| 14.3 | transport hazard class(es)   | none  |
| 14.4 | packing group  | not assigned to a packing group                                       |
| 14.5 | environmental hazards  | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 | special precautions for user                                       | there is no additional information.                                   |
| 14.7 | transport in bulk according to Annex II of MARPOL and the IBC Code | the cargo is not intended to be carried in bulk.                      |

#### Information for each of the UN Model Regulations

##### **transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

not subject to ADR, RID and ADN.

##### **International Maritime Dangerous Goods Code (IMDG)**

not subject to IMDG.

##### **International Civil Aviation Organization (ICAO-IATA/DGR)**

not subject to ICAO-IATA.

### SECTION 15: Regulatory information

- 15.1 **safety, health and environmental regulations/legislation specific for the substance or mixture**
- 15.2 **Chemical Safety Assessment**
- chemical safety assessments for substances in this mixture were not carried out.

## Primer index 1-24

version number: GHS 1.0

date of compilation: 2020-06-22

### SECTION 16: Other information

#### abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
vPvB	Very Persistent and very Bioaccumulative

#### key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

#### classification procedure

physical and chemical properties: the classification is based on tested mixture.

health hazards, environmental hazards: the method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### disclaimer

this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.