

## Chromatin EasyShear Kit – Ultra Low SDS

**C01020010**

### Flyleaf

Date of compilation: 2020-06-08

#### Bill of materials

Name of substance	Identifier	Number of pieces	Classification acc. to GHS	Pictograms	Page
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## 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

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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
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## 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
<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.

## 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.

## 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

- |   |   |
|---|---|
| 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.



## 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.

**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 category	hazard statement
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 (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

## lysis buffer iL1

version number: GHS 1.1

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### 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
<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.

## 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**

- 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.



## 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.

## 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
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## 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.

## Elution Buffer iE1

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

trade name	<b>Elution Buffer iE1</b>
registration number (REACH)	not relevant (mixture)
product code(s)	C01019014

#### 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.
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#### 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
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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.

## Elution Buffer iE1

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

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

name of substance	identifier	wt%	classification acc. to GHS	pictograms
Sodium dodecyl sulphate	CAS No 151-21-3  EC No 205-788-1  REACH Reg. No 01-2119489461-32-xxxx	≤ 2	Flam. Sol. 2 / H228 Acute Tox. 4 / H302 Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 STOT SE 3 / H335 Aquatic Chronic 3 / H412	

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

## Elution Buffer iE1

version number: GHS 2.0  
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### 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.

### 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.

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**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
Sodium dodecyl sulphate	151-21-3	DNEL	285 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Sodium dodecyl sulphate	151-21-3	DNEL	4,060 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
Sodium dodecyl sulphate	151-21-3	PNEC	0.176 mg/l	aquatic organisms	freshwater	short-term (single instance)
Sodium dodecyl sulphate	151-21-3	PNEC	0.018 mg/l	aquatic organisms	marine water	short-term (single instance)
Sodium dodecyl sulphate	151-21-3	PNEC	1.35 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Sodium dodecyl sulphate	151-21-3	PNEC	6.97 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Sodium dodecyl sulphate	151-21-3	PNEC	0.697 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Sodium dodecyl sulphate	151-21-3	PNEC	1.29 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.

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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
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
--------------------------	------------------------------------

## Elution Buffer iE1

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

revision: 2019-12-23

### 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).



## Elution Buffer iE1

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

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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.

### 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.

## Elution Buffer iE1

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

revision: 2019-12-23

### 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

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

section	former entry (text/value)	actual entry (text/value)	safety-relevant
1.1		product code(s): C01019014	yes
3.2	mixtures	mixtures: description of the mixture	yes
8.1		relevant DNELs of components of the mixture: change in the listing (table)	yes
8.1		relevant PNECs of components of the mixture: change in the listing (table)	yes
16		abbreviations and acronyms: change in the listing (table)	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 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)

## Elution Buffer iE1

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

revision: 2019-12-23

abbr.	descriptions of used abbreviations
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
Flam. Sol.	Flammable solid
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
STOT SE	Specific target organ toxicity - single exposure
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
H228	Flammable solid.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

## Elution Buffer iE1

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

revision: 2019-12-23

code	text
H335	May cause respiratory irritation.
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.

## elution buffer iE2

version number: GHS 3.0  
replaces version of: 2019-12-02 (GHS 2)

revision: 2019-12-23

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

#### 1.1 product identifier

trade name **elution buffer iE2**  
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.

## elution buffer iE2

version number: GHS 3.0  
replaces version of: 2019-12-02 (GHS 2)

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 (CO2)

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.

## elution buffer iE2

version number: GHS 3.0  
replaces version of: 2019-12-02 (GHS 2)

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.

**elution buffer iE2**

version number: GHS 3.0  
replaces version of: 2019-12-02 (GHS 2)

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)



**elution buffer iE2**

version number: GHS 3.0  
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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.

## elution buffer iE2

version number: GHS 3.0  
replaces version of: 2019-12-02 (GHS 2)

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.

## elution buffer iE2

version number: GHS 3.0  
replaces version of: 2019-12-02 (GHS 2)

revision: 2019-12-23

### 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.

## SECTION 14: Transport information

- |      |   |   |
|------|---|---|
| 14.1 | <b>UN number</b>  | not subject to transport regulations                                  |
| 14.2 | <b>UN proper shipping name</b>  | not relevant  |
| 14.3 | <b>transport hazard class(es)</b>   | none  |
| 14.4 | <b>packing group</b>  | not assigned to a packing group                                       |
| 14.5 | <b>environmental hazards</b>  | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 | <b>special precautions for user</b>                                       | there is no additional information.                                   |
| 14.7 | <b>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.

## elution buffer iE2

version number: GHS 3.0  
replaces version of: 2019-12-02 (GHS 2)

revision: 2019-12-23

### 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

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

section	former entry (text/value)	actual entry (text/value)	safety-rel- evant
3.2	mixtures: description of the mixture	mixtures: description of the mixture  This mixture does not contain any potentially hazard- ous 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).

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

## elution buffer iE2

version number: GHS 3.0  
replaces version of: 2019-12-02 (GHS 2)

revision: 2019-12-23

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### **disclaimer**

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

## TE buffer

version number: GHS 1.0

date of compilation: 2020-02-20

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

#### 1.1 product identifier

trade name

**TE 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.

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version number: GHS 1.0

date of compilation: 2020-02-20

### 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.

## TE buffer

version number: GHS 1.0

date of compilation: 2020-02-20

### 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.



**TE buffer**

version number: GHS 1.0

date of compilation: 2020-02-20

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	various
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
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## TE buffer

version number: GHS 1.0

date of compilation: 2020-02-20

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.

## TE buffer

version number: GHS 1.0

date of compilation: 2020-02-20

### 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.

**TE buffer**

version number: GHS 1.0

date of compilation: 2020-02-20

**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

## TE buffer

version number: GHS 1.0

date of compilation: 2020-02-20

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.

**DNA precipitant**

version number: GHS 1.0

date of compilation: 2020-02-20

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

**1.1 product identifier**

trade name

**DNA precipitant**

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.

## DNA precipitant

version number: GHS 1.0

date of compilation: 2020-02-20

### 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.

#### 6.2 environmental precautions

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

## DNA precipitant

version number: GHS 1.0

date of compilation: 2020-02-20

### 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.



**DNA precipitant**

version number: GHS 1.0

date of compilation: 2020-02-20

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
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## DNA precipitant

version number: GHS 1.0

date of compilation: 2020-02-20

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.

## DNA precipitant

version number: GHS 1.0

date of compilation: 2020-02-20

### 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.

**DNA precipitant**

version number: GHS 1.0

date of compilation: 2020-02-20

**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

## DNA precipitant

version number: GHS 1.0

date of compilation: 2020-02-20

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.

## DNA co-precipitant

version number: GHS 1.0

date of compilation: 2020-02-20

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

#### 1.1 product identifier

trade name

**DNA co-precipitant**

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.

## DNA co-precipitant

version number: GHS 1.0

date of compilation: 2020-02-20

### 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.

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### 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.



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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
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date of compilation: 2020-02-20

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.

## DNA co-precipitant

version number: GHS 1.0

date of compilation: 2020-02-20

### 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.

**DNA co-precipitant**

version number: GHS 1.0

date of compilation: 2020-02-20

**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

## DNA co-precipitant

version number: GHS 1.0

date of compilation: 2020-02-20

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.
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#### 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
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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.