







IDeal ChIP-qPCR Kit C01010180/C01010181 Flyleaf

Date of compilation: 2020-03-26

Bill of materials

Name of substance	Identifier	Number of pieces	Classification acc. to GHS	Pictograms	Page
Protease Inhibitor Mix		1			2 – 10
5% BSA		1			11 – 18
proteinase K		1	Resp. Sens. 1 / H334		19 – 27
rabbit IgG		1			28 – 36
Glycine		1			37 – 44
Shearing buffer iS1b		1	Eye Irrit. 2 / H319 Aquatic Chronic 3 / H412		45 – 53
DiaMag protein A-coated magnetic beads		1			54 – 61
wash buffer iW1		1	Eye Irrit. 2 / H319 Aquatic Chronic 3 / H412		62 – 71
Wash buffer iW2		1	Eye Irrit. 2 / H319 Aquatic Chronic 3 / H412		72 – 80
Wash buffer iW3		1			81 – 89
Wash buffer iW4		1			90 – 97
ChIP-seq grade water		1			98 – 105
Fixation buffer		1			106 – 113
DNA Isolation Buffer (DIB)		1			114 – 121
5x ChIP buffer iC1b		1	Eye Dam. 1 / H318 Aquatic Chronic 2 / H411	 	122 – 133
Lysis buffer iL1b		1			134 – 141
Lysis Buffer iL2		1			142 – 149
Elution Buffer iE1		1			150 – 159
elution buffer iE2		1			160 – 168

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	Protease Inhibitor Mix
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 (CO₂)

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO₂)

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
9.2 other information	there is no additional information

SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

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

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

oxidisers

10.6 hazardous decomposition products

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

Protease Inhibitor Mix

version number: GHS 2.0
replaces version of: 2019-11-29 (GHS 1)

revision: 2020-02-28

SECTION 11: Toxicological information

11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

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

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

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

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

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

specific target organ toxicity - repeated exposure

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

aspiration hazard

shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 toxicity

shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability

data are not available.

12.3 bioaccumulative potential

data are not available.

12.4 mobility in soil

data are not available.

12.5 results of PBT and vPvB assessment

data are not available.

Protease Inhibitor Mix

version number: GHS 2.0
replaces version of: 2019-11-29 (GHS 1)

revision: 2020-02-28

12.6 other adverse effects

data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods

sewage disposal-relevant information

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

waste treatment of containers/packagings

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

remarks

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

SECTION 14: Transport information

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

Information for each of the UN Model Regulations

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

not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

15.2 Chemical Safety Assessment

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

Protease Inhibitor Mix

version number: GHS 2.0
replaces version of: 2019-11-29 (GHS 1)

revision: 2020-02-28

SECTION 16: Other information

indication of changes (revised safety data sheet)

section	former entry (text/value)	actual entry (text/value)	safety-relevant
1.1	trade name: protease inhibitor cocktail	trade name: Protease Inhibitor Mix	yes
1.1	product code(s): C12010011	product code(s): C12010010/C12010011/C12010012	yes
2.3	other hazards: this material is combustible, but will not ignite readily.	other hazards	yes
3.2	mixtures	mixtures: description of the mixture	yes
9.1	initial boiling point and boiling range: 189 °C at 1,013 hPa	initial boiling point and boiling range: not determined	yes
9.1	flash point: 87 °C at 1,013 hPa	flash point: not determined	yes
9.1	explosive limits	explosive limits: not determined	yes
9.1	lower explosion limit (LEL): 2.6 vol%		yes
9.1	upper explosion limit (UEL): 28.5 vol%		yes
9.1	vapour pressure: 0.417 mmHg at 20 °C	vapour pressure: not determined	yes
9.1	auto-ignition temperature: 300 °C (auto-ignition temperature (liquids and gases))	auto-ignition temperature: not determined	yes
9.2	other information	other information: there is no additional information	yes
9.2	temperature class (EU, acc. to ATEX): T3 (maximum permissible surface temperature on the equipment: 200°C)		yes
14.3	transport hazard class(es): not assigned	transport hazard class(es): none	yes
14.4	packing group: not assigned	packing group: not assigned to a packing group	yes
14.7	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)		yes
14.7	identifier number: 9003		yes
14.7	proper shipping name: SUBSTANCES WITH A FLASH-POINT ABOVE 60 °C AND NOT MORE THAN 100 °C		yes
14.7	class: 9		yes
14.7	number of cones/blue lights: 0		yes

Protease Inhibitor Mix

version number: GHS 2.0
replaces version of: 2019-11-29 (GHS 1)

revision: 2020-02-28

section	former entry (text/value)	actual entry (text/value)	safety-relevant
14.7	transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN): not subject to ADR. not subject to RID.	transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN): not subject to ADR, RID and ADN.	yes

abbreviations and acronyms

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

key literature references and sources for data

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

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

classification procedure

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

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

disclaimer

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

5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

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

1.1 product identifier

trade name **5% BSA**
registration number (REACH) not relevant (mixture)

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

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

1.3 details of the supplier of the safety data sheet

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

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

1.4 emergency telephone number

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

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

SECTION 2: Hazards identification

2.1 classification of the substance or mixture

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

2.2 label elements

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

2.3 other hazards

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

SECTION 3: Composition/information on ingredients

3.1 substances

not relevant (mixture)

5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

3.2 mixtures

SECTION 4: First aid measures

4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO₂)

5.3 advice for firefighters

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

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

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

5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

6.2 environmental precautions

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

6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections

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

SECTION 7: Handling and storage

7.1 precautions for safe handling

recommendations

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

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

advice on general occupational hygiene

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

7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

7.3 specific end use(s)

see section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 control parameters

this information is not available.

8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

skin protection

- hand protection

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

- other protection measures

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

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1 information on basic physical and chemical properties

appearance

physical state	liquid
colour	whitish yellow
odour	odourless

other safety parameters

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

partition coefficient

- n-octanol/water (log KOW)	this information is not available
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5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

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

SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

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

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

oxidisers

10.6 hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

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

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

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

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

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

specific target organ toxicity - repeated exposure

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

aspiration hazard

shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 toxicity

shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability

data are not available.

12.3 bioaccumulative potential

data are not available.

12.4 mobility in soil

data are not available.

12.5 results of PBT and vPvB assessment

data are not available.

12.6 other adverse effects

data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods

sewage disposal-relevant information

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

waste treatment of containers/packagings

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

remarks

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

5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

SECTION 14: Transport information

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

Information for each of the UN Model Regulations

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

not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

SECTION 16: Other information

abbreviations and acronyms

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

5% BSA

version number: GHS 1.0

date of compilation: 2019-11-22

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

key literature references and sources for data

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

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

classification procedure

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

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

disclaimer

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

proteinase K

version number: GHS 1.0

date of compilation: 2020-03-24

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

1.1 product identifier

trade name **proteinase K**
registration number (REACH) not relevant (mixture)

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

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

1.3 details of the supplier of the safety data sheet

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

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

1.4 emergency telephone number

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

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

SECTION 2: Hazards identification

2.1 classification of the substance or mixture

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

section	hazard class	category	hazard class and category	hazard statement
3.4R	respiratory sensitisation	1	Resp. Sens. 1	H334

for full text of abbreviations: see SECTION 16.

2.2 label elements

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

- signal word danger

- pictograms

GHS08



- hazard statements

H334

may cause allergy or asthma symptoms or breathing difficulties if inhaled.

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- precautionary statements
 - P261 avoid breathing dust/fume/gas/mist/vapours/spray.
 - P284 in case of inadequate ventilation wear respiratory protection.
 - P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 - P342+P311 if experiencing respiratory symptoms: Call a POISON CENTER/doctor.
 - P501 dispose of contents/container to industrial combustion plant.
- hazardous ingredients for labelling Proteinase, tritirachium album serine

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
Proteinase, tritirachium album serine	CAS No 39450-01-6	2	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Resp. Sens. 1A / H334	

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

proteinase K

version number: GHS 1.0

date of compilation: 2020-03-24

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.

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.

proteinase K

version number: GHS 1.0

date of compilation: 2020-03-24

7.2 conditions for safe storage, including any incompatibilities

control of effects
protect against external exposure, such as
frost

7.3 specific end use(s)

see section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 control parameters

this information is not available.

8.2 exposure controls

appropriate engineering controls
general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

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

- other protection measures

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

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1 information on basic physical and chemical properties

appearance

physical state	liquid
colour	colourless
odour	odourless

proteinase K

version number: GHS 1.0

date of compilation: 2020-03-24

other safety parameters

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

partition coefficient

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

9.2 other information	there is no additional information
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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.

proteinase K

version number: GHS 1.0

date of compilation: 2020-03-24

10.6 hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

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

respiratory or skin sensitisation

may cause allergy or asthma symptoms or breathing difficulties if inhaled.

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.

proteinase K

version number: GHS 1.0

date of compilation: 2020-03-24

12.5 results of PBT and vPvB assessment

data are not available.

12.6 other adverse effects

data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods

sewage disposal-relevant information

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

waste treatment of containers/packagings

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

remarks

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

SECTION 14: Transport information

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

Information for each of the UN Model Regulations

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

not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

proteinase K

version number: GHS 1.0

date of compilation: 2020-03-24

SECTION 15: Regulatory information

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

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
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
Resp. Sens.	Respiratory sensitisation
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
vPvB	Very Persistent and very Bioaccumulative

key literature references and sources for data

proteinase K

version number: GHS 1.0

date of compilation: 2020-03-24

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
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

disclaimer

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

rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

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

1.1 product identifier

trade name **rabbit IgG**
registration number (REACH) not relevant (mixture)
product code(s) C15410206

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

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

1.3 details of the supplier of the safety data sheet

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

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

1.4 emergency telephone number

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

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

SECTION 2: Hazards identification

2.1 classification of the substance or mixture

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

2.2 label elements

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

2.3 other hazards

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

rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

SECTION 3: Composition/information on ingredients

3.1 substances

not relevant (mixture)

3.2 mixtures

description of the mixture

SECTION 4: First aid measures

4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO_x)

5.3 advice for firefighters

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

rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

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

6.2 environmental precautions

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

6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections

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

SECTION 7: Handling and storage

7.1 precautions for safe handling

recommendations

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

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

advice on general occupational hygiene

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

7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

7.3 specific end use(s)

see section 16 for a general overview.

rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

SECTION 8: Exposure controls/personal protection

8.1 control parameters

occupational exposure limit values (Workplace Exposure Limits)											
country	name of agent	CAS No	identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Ceiling-C [ppm]	Ceiling-C [mg/m ³]	notation	source
GB	sucrose	57-50-1	WEL		10		20				EH40/2005

notation

Ceiling-C

STEL

TWA

ceiling value is a limit value above which exposure should not occur

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

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

8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

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

- other protection measures

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

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1 information on basic physical and chemical properties

appearance

physical state	liquid
colour	colourless
odour	odourless

rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

other safety parameters

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

partition coefficient

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

9.2 other information	there is no additional information
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SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

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

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

there is no additional information.

rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

10.6 hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

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

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

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

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

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

specific target organ toxicity - repeated exposure

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

aspiration hazard

shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 toxicity

shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability

data are not available.

12.3 bioaccumulative potential

data are not available.

12.4 mobility in soil

data are not available.

rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

12.5 results of PBT and vPvB assessment

data are not available.

12.6 other adverse effects

data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods

sewage disposal-relevant information

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

waste treatment of containers/packagings

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

remarks

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

SECTION 14: Transport information

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

Information for each of the UN Model Regulations

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

not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

SECTION 15: Regulatory information

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

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

abbreviations and acronyms

abbr.	descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

key literature references and sources for data

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

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

classification procedure

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

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

rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

disclaimer

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

Glycine

version number: GHS 1.0

date of compilation: 2019-12-02

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

1.1 product identifier

trade name **Glycine**
registration number (REACH) not relevant (mixture)

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

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

1.3 details of the supplier of the safety data sheet

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

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

1.4 emergency telephone number

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

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

SECTION 2: Hazards identification

2.1 classification of the substance or mixture

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

2.2 label elements

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

2.3 other hazards

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

SECTION 3: Composition/information on ingredients

3.1 substances

not relevant (mixture)

3.2 mixtures

description of the mixture

Glycine

version number: GHS 1.0

date of compilation: 2019-12-02

SECTION 4: First aid measures

4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂)

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
9.2 other information	there is no additional information

SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

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

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

oxidisers

10.6 hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

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

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

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

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

Glycine

version number: GHS 1.0

date of compilation: 2019-12-02

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

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

specific target organ toxicity - repeated exposure

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

aspiration hazard

shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 toxicity

shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability

data are not available.

12.3 bioaccumulative potential

data are not available.

12.4 mobility in soil

data are not available.

12.5 results of PBT and vPvB assessment

data are not available.

12.6 other adverse effects

data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods

sewage disposal-relevant information

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

waste treatment of containers/packagings

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

remarks

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

Glycine

version number: GHS 1.0

date of compilation: 2019-12-02

SECTION 14: Transport information

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

Information for each of the UN Model Regulations

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

not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

SECTION 16: Other information

abbreviations and acronyms

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

Glycine

version number: GHS 1.0

date of compilation: 2019-12-02

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

key literature references and sources for data

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

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

classification procedure

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

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

disclaimer

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

Shearing buffer iS1b

version number: GHS 1.0

date of compilation: 2019-11-22

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

1.1 product identifier

trade name **Shearing buffer iS1b**
registration number (REACH) not relevant (mixture)

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

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

1.3 details of the supplier of the safety data sheet

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

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

1.4 emergency telephone number

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

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

SECTION 2: Hazards identification

2.1 classification of the substance or mixture

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

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

for full text of abbreviations: see SECTION 16.

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

2.2 label elements

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

- signal word warning

- pictograms

GHS07



Shearing buffer iS1b

version number: GHS 1.0

date of compilation: 2019-11-22

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

2.3 other hazards


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

SECTION 3: Composition/information on ingredients

3.1 substances

not relevant (mixture)

3.2 mixtures

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

for full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

Shearing buffer iS1b

version number: GHS 1.0

date of compilation: 2019-11-22

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO_x)

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.

Shearing buffer iS1b

version number: GHS 1.0

date of compilation: 2019-11-22

SECTION 7: Handling and storage

7.1 precautions for safe handling

recommendations

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

advice on general occupational hygiene

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

7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as
frost

7.3 specific end use(s)

see section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 control parameters

this information is not available.

8.2 exposure controls

appropriate engineering controls
general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

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

- other protection measures

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

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

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

Shearing buffer iS1b

version number: GHS 1.0

date of compilation: 2019-11-22

SECTION 9: Physical and chemical properties

9.1 information on basic physical and chemical properties

appearance

physical state	liquid
colour	colourless
odour	odourless

other safety parameters

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

partition coefficient

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

9.2

other information	there is no additional information
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Shearing buffer iS1b

version number: GHS 1.0

date of compilation: 2019-11-22

SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

see below "Conditions to avoid".

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

there is no additional information.

10.6 hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

causes serious eye irritation.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

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

specific target organ toxicity - repeated exposure

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

Shearing buffer iS1b

version number: GHS 1.0

date of compilation: 2019-11-22

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

SECTION 12: Ecological information

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

SECTION 13: Disposal considerations

- 13.1 waste treatment methods**
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) | 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. |

Shearing buffer iS1b

version number: GHS 1.0

date of compilation: 2019-11-22

Information for each of the UN Model Regulations

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

not subject to ADR. not subject to RID.

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

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

International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

abbreviations and acronyms

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

Shearing buffer iS1b

version number: GHS 1.0

date of compilation: 2019-11-22

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

key literature references and sources for data

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

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

classification procedure

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

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

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

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

disclaimer

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

DiaMag protein A-coated magnetic beads

version number: GHS 1.0

date of compilation: 2019-12-02

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

1.1 product identifier

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

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

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

DiaMag protein A-coated magnetic beads

version number: GHS 1.0

date of compilation: 2019-12-02

SECTION 3: Composition/information on ingredients

3.1 substances

not relevant (mixture)

3.2 mixtures

description of the mixture

SECTION 4: First aid measures

4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO_x)

5.3 advice for firefighters

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

DiaMag protein A-coated magnetic beads

version number: GHS 1.0

date of compilation: 2019-12-02

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

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

6.2 environmental precautions

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

6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections

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

SECTION 7: Handling and storage

7.1 precautions for safe handling

recommendations

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

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

advice on general occupational hygiene

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

7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

7.3 specific end use(s)

see section 16 for a general overview.

DiaMag protein A-coated magnetic beads

version number: GHS 1.0

date of compilation: 2019-12-02

SECTION 8: Exposure controls/personal protection

8.1 control parameters

this information is not available.

8.2 exposure controls

appropriate engineering controls
general ventilation.

individual protection measures (personal protective equipment)

eye/face protection
wear eye/face protection.

skin protection

- hand protection

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

- other protection measures

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

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1 information on basic physical and chemical properties

appearance

physical state	liquid (suspension)
colour	brown
odour	odourless

other safety parameters

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

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

SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

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

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

there is no additional information.

10.6 hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

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

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

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

DiaMag protein A-coated magnetic beads

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date of compilation: 2019-12-02

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

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

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

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

specific target organ toxicity - repeated exposure

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

aspiration hazard

shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 toxicity

shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability

data are not available.

12.3 bioaccumulative potential

data are not available.

12.4 mobility in soil

data are not available.

12.5 results of PBT and vPvB assessment

data are not available.

12.6 other adverse effects

data are not available.

DiaMag protein A-coated magnetic beads

version number: GHS 1.0

date of compilation: 2019-12-02

SECTION 13: Disposal considerations

13.1 waste treatment methods

waste treatment-relevant information

recycling/reclamation of other inorganic materials.

sewage disposal-relevant information

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

waste treatment of containers/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.

DiaMag protein A-coated magnetic beads

version number: GHS 1.0

date of compilation: 2019-12-02

SECTION 16: Other information

abbreviations and acronyms

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

key literature references and sources for data

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

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

classification procedure

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

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

disclaimer

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

wash buffer iW1

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

revision: 2019-12-02

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

1.1 product identifier

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

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

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

1.3 details of the supplier of the safety data sheet

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

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

1.4 emergency telephone number

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

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

SECTION 2: Hazards identification

2.1 classification of the substance or mixture

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

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

for full text of abbreviations: see SECTION 16.

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

2.2 label elements

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

- signal word warning

- pictograms

GHS07



wash buffer iW1

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

revision: 2019-12-02

- hazard statements

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

- precautionary statements

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

2.3 other hazards

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


SECTION 3: Composition/information on ingredients

3.1 substances

not relevant (mixture)

3.2 mixtures

description of the mixture

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

for full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

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revision: 2019-12-02

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO_x)

5.3 advice for firefighters

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

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

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

6.2 environmental precautions

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

6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections

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

wash buffer iW1

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

revision: 2019-12-02

SECTION 7: Handling and storage

7.1 precautions for safe handling

recommendations

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

advice on general occupational hygiene

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

7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as
frost

7.3 specific end use(s)

see section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 control parameters

this information is not available.

8.2 exposure controls

appropriate engineering controls
general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

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

- other protection measures

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

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

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

wash buffer iW1

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

revision: 2019-12-02

SECTION 9: Physical and chemical properties

9.1 information on basic physical and chemical properties

appearance

physical state	liquid
colour	colourless
odour	odourless

other safety parameters

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

partition coefficient

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

9.2 other information

	there is no additional information
--	------------------------------------

wash buffer iW1

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

revision: 2019-12-02

SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

see below "Conditions to avoid".

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

there is no additional information.

10.6 hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

causes serious eye irritation.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

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

specific target organ toxicity - repeated exposure

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

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

SECTION 12: Ecological information

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

SECTION 13: Disposal considerations

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

SECTION 14: Transport information

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

wash buffer iW1

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

revision: 2019-12-02

Information for each of the UN Model Regulations

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

not subject to ADR. not subject to RID.

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

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

International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

indication of changes (revised safety data sheet)

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

abbreviations and acronyms

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

wash buffer iW1

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

revision: 2019-12-02

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

key literature references and sources for data

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

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

classification procedure

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

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

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

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

Safety Data Sheet

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

wash buffer iW1

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

revision: 2019-12-02

disclaimer

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

Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

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

1.1 product identifier

trade name **Wash buffer iW2**
registration number (REACH) not relevant (mixture)

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

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

1.3 details of the supplier of the safety data sheet

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

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

1.4 emergency telephone number

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

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

SECTION 2: Hazards identification

2.1 classification of the substance or mixture

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

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

for full text of abbreviations: see SECTION 16.

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

2.2 label elements

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

- signal word warning

- pictograms

GHS07



Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

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

2.3 other hazards

results of PBT and vPvB assessment


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

SECTION 3: Composition/information on ingredients

3.1 substances

not relevant (mixture)

3.2 mixtures

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

for full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO_x)

5.3 advice for firefighters

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

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

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

6.2 environmental precautions

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

6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections

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

Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

SECTION 7: Handling and storage

7.1 precautions for safe handling

recommendations

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

advice on general occupational hygiene

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

7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as
frost

7.3 specific end use(s)

see section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 control parameters

this information is not available.

8.2 exposure controls

appropriate engineering controls
general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

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

- other protection measures

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

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

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

Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

SECTION 9: Physical and chemical properties

9.1 information on basic physical and chemical properties

appearance

physical state	liquid
colour	colourless
odour	odourless

other safety parameters

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

partition coefficient

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

auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none

9.2 other information

	there is no additional information
--	------------------------------------

Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

see below "Conditions to avoid".

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

there is no additional information.

10.6 hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

causes serious eye irritation.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

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

specific target organ toxicity - repeated exposure

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

Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

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

SECTION 12: Ecological information

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

SECTION 13: Disposal considerations

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

SECTION 14: Transport information

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

Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

Information for each of the UN Model Regulations

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

not subject to ADR. not subject to RID.

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

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

International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

abbreviations and acronyms

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

Wash buffer iW2

version number: GHS 1.0

date of compilation: 2019-11-22

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

key literature references and sources for data

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

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

classification procedure

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

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

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

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

disclaimer

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

Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

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

1.1 product identifier

trade name

Wash buffer iW3

registration number (REACH)

not relevant (mixture)

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

relevant identified uses

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

1.3 details of the supplier of the safety data sheet

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

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

1.4 emergency telephone number

emergency information service

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

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

SECTION 2: Hazards identification

2.1 classification of the substance or mixture

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

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

2.2 label elements

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

- signal word not required

- pictograms not required

- supplemental hazard information

EUH210 safety data sheet available on request.

2.3 other hazards

there is no additional information.

results of PBT and vPvB assessment

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

Wash buffer iW3

version number: GHS 1.0


date of compilation: 2019-11-22

SECTION 3: Composition/information on ingredients

3.1 substances

not relevant (mixture)

3.2 mixtures

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

for full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO_x)

Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

5.3 advice for firefighters

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

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

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

6.2 environmental precautions

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

6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections

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

SECTION 7: Handling and storage

7.1 precautions for safe handling

recommendations

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

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

advice on general occupational hygiene

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

7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

7.3 specific end use(s)

see section 16 for a general overview.

Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

SECTION 8: Exposure controls/personal protection

8.1 control parameters

this information is not available.

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

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

8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

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

- other protection measures

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

respiratory protection

in case of inadequate ventilation wear respiratory protection.

Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1 information on basic physical and chemical properties

appearance

physical state	liquid
colour	colourless
odour	odourless

other safety parameters

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

partition coefficient

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

9.2 other information

there is no additional information

Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

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

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

there is no additional information.

10.6 hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

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

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

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

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

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

specific target organ toxicity - repeated exposure

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

Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

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

SECTION 12: Ecological information

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

SECTION 13: Disposal considerations

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

SECTION 14: Transport information

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

Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

Information for each of the UN Model Regulations

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

not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

abbreviations and acronyms

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

Wash buffer iW3

version number: GHS 1.0

date of compilation: 2019-11-22

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

key literature references and sources for data

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

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

classification procedure

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

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

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

code	text
H302	Harmful if swallowed.

disclaimer

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

Wash buffer iW4

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 **Wash buffer iW4**
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.

Wash buffer iW4

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

hazardous combustion products

nitrogen oxides (NO_x)

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.

Wash buffer iW4

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

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

SECTION 7: Handling and storage

7.1 precautions for safe handling

recommendations

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

advice on general occupational hygiene

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

7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as
frost

7.3 specific end use(s)

see section 16 for a general overview.

Wash buffer iW4

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)

Wash buffer iW4

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

revision: 2019-12-23

explosive limits	not determined
vapour pressure	not determined
density	1 g/cm ³ at 20 °C
vapour density	this information is not available
solubility(ies)	not determined
partition coefficient	
- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
9.2 other information	there is no additional information

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.

Wash buffer iW4

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.

Wash buffer iW4

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

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.

Wash buffer iW4

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

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.

ChIP-seq grade water

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

revision: 2019-12-23

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

1.1 product identifier

identification of the substance	ChIP-seq grade water
registration number (REACH)	this information is not available
CAS number	7732-18-5

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

relevant identified uses	for research use only, not for use in diagnostic or therapeutic procedures.
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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 substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

2.2 label elements

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

2.3 other hazards

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

ChIP-seq grade water

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

revision: 2019-12-23

SECTION 3: Composition/information on ingredients

3.1 substances

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

SECTION 4: First aid measures

4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

water spray, alcohol resistant foam, BC-powder, carbon dioxide (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.

ChIP-seq grade water

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

revision: 2019-12-23

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel
remove persons to safety.

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

6.2 environmental precautions

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

6.3 methods and material for containment and cleaning up

advice on how to contain a spill
covering of drains

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

appropriate containment techniques
use of adsorbent materials.

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

6.4 reference to other sections

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

SECTION 7: Handling and storage

7.1 precautions for safe handling

recommendations

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

advice on general occupational hygiene

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

7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as
frost

7.3 specific end use(s)

see section 16 for a general overview.

ChIP-seq grade water

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

revision: 2019-12-23

SECTION 8: Exposure controls/personal protection

8.1 control parameters

this information is not available.

8.2 exposure controls

appropriate engineering controls
general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

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

- other protection measures

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

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1 information on basic physical and chemical properties

appearance

physical state	liquid
colour	colourless
odour	odourless

other safety parameters

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

ChIP-seq grade water

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

revision: 2019-12-23

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

SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

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

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

there is no additional information.

10.6 hazardous decomposition products

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

ChIP-seq grade water

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

revision: 2019-12-23

SECTION 11: Toxicological information

11.1 information on toxicological effects

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

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

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

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

specific target organ toxicity - repeated exposure

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

aspiration hazard

shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 toxicity

shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability

data are not available.

12.3 bioaccumulative potential

data are not available.

12.4 mobility in soil

data are not available.

12.5 results of PBT and vPvB assessment

data are not available.

12.6 other adverse effects

data are not available.

ChIP-seq grade water

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

revision: 2019-12-23

SECTION 13: Disposal considerations

13.1 waste treatment methods

waste treatment-relevant information

recycling/reclamation of other inorganic materials.

sewage disposal-relevant information

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

waste treatment of containers/packagings

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

remarks

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

SECTION 14: Transport information

- | | | |
|------|---|---|
| 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**
no Chemical Safety Assessment has been carried out for this substance.

ChIP-seq grade water

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

revision: 2019-12-23

SECTION 16: Other information

indication of changes (revised safety data sheet)

section	former entry (text/value)	actual entry (text/value)	safety-relevant
5.1	suitable extinguishing media: not applicable	suitable extinguishing media: water spray, alcohol resistant foam, BC-powder, carbon dioxide (CO ₂)	yes
5.1	unsuitable extinguishing media: not applicable	unsuitable extinguishing media: water jet	yes

abbreviations and acronyms

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

key literature references and sources for data

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

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

disclaimer

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

Fixation buffer

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

Fixation 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.

Fixation buffer

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 (CO₂)

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO_x)

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.

Fixation buffer

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.

Fixation buffer

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)

Fixation buffer

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
9.2 other information	there is no additional information

SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

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

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

there is no additional information.

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.

Fixation buffer

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.

Fixation buffer

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.

Fixation buffer

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.

DNA Isolation Buffer (DIB)

version number: GHS 1.0

date of compilation: 2020-03-26

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

1.1 product identifier

trade name

DNA Isolation Buffer (DIB)

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 Isolation Buffer (DIB)

version number: GHS 1.0

date of compilation: 2020-03-26

SECTION 4: First aid measures

4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO_x)

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 Isolation Buffer (DIB)

version number: GHS 1.0

date of compilation: 2020-03-26

6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections

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

SECTION 7: Handling and storage

7.1 precautions for safe handling

recommendations

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

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

advice on general occupational hygiene

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

7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as

frost

7.3 specific end use(s)

see section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 control parameters

this information is not available.

8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

DNA Isolation Buffer (DIB)

version number: GHS 1.0

date of compilation: 2020-03-26

skin protection

- hand protection

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

- other protection measures

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

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1 information on basic physical and chemical properties

appearance

physical state	liquid
colour	colourless
odour	odourless

other safety parameters

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

partition coefficient

- n-octanol/water (log KOW)	this information is not available
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DNA Isolation Buffer (DIB)

version number: GHS 1.0

date of compilation: 2020-03-26

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

SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

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

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

there is no additional information.

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 Isolation Buffer (DIB)

version number: GHS 1.0

date of compilation: 2020-03-26

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

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

specific target organ toxicity - repeated exposure

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

aspiration hazard

shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 toxicity

shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability

data are not available.

12.3 bioaccumulative potential

data are not available.

12.4 mobility in soil

data are not available.

12.5 results of PBT and vPvB assessment

data are not available.

12.6 other adverse effects

data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods

sewage disposal-relevant information

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

waste treatment of containers/packagings

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

remarks

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

DNA Isolation Buffer (DIB)

version number: GHS 1.0

date of compilation: 2020-03-26

SECTION 14: Transport information

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

Information for each of the UN Model Regulations

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

not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG)

not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

SECTION 16: Other information

abbreviations and acronyms

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

DNA Isolation Buffer (DIB)

version number: GHS 1.0

date of compilation: 2020-03-26

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

key literature references and sources for data

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

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

classification procedure

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

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

disclaimer

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

5x ChIP buffer iC1b

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 **5x ChIP buffer iC1b**
registration number (REACH) not relevant (mixture)

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

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

1.3 details of the supplier of the safety data sheet

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

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

1.4 emergency telephone number

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

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

SECTION 2: Hazards identification

2.1 classification of the substance or mixture

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

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

for full text of abbreviations: see SECTION 16.

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

2.2 label elements

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

- signal word danger

- pictograms
GHS05, GHS09



5x ChIP buffer iC1b

version number: GHS 2.0
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revision: 2019-12-23

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

- hazardous ingredients for labelling Triton X-100, Sodium dodecyl sulphate

2.3 other hazards

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

SECTION 3: Composition/information on ingredients

3.1 substances

not relevant (mixture)

3.2 mixtures

description of the mixture

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

5x ChIP buffer iC1b

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

revision: 2019-12-23

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

hazardous combustion products

nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂)

5.3 advice for firefighters

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

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

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

6.2 environmental precautions

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

6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

5x ChIP buffer iC1b

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

revision: 2019-12-23

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

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

7.3 specific end use(s)

see section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 control parameters

this information is not available.

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 ³	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)

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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	0.697 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.

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

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evaporation rate	not determined
flammability (solid, gas)	not relevant, (fluid)
explosive limits	not determined
vapour pressure	not determined
density	1 g/cm ³ at 20 °C
vapour density	this information is not available
solubility(ies)	not determined
partition coefficient	
- n-octanol/water (log KOW)	this information is not available
auto-ignition temperature	not determined
viscosity	not determined
explosive properties	none
oxidising properties	none
9.2 other information	there is no additional information

SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

see below "Conditions to avoid".

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

oxidisers

10.6 hazardous decomposition products

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

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SECTION 11: Toxicological information

11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

causes serious eye damage.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

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

specific target organ toxicity - repeated exposure

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

aspiration hazard

shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 toxicity

toxic to aquatic life with long lasting effects.

aquatic toxicity (chronic) of components of the mixture					
name of substance	CAS No	endpoint	value	species	exposure time
Sodium dodecyl sulfate	151-21-3	EC50	135 mg/l	microorganisms	3 h

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12.2 persistence and degradability

degradability of components of the mixture						
name of substance	CAS No	process	degradation rate	time	method	source
Sodium dodecyl sulfate	151-21-3	carbon dioxide generation	95 %	28 d		ECHA

12.3 bioaccumulative potential

data are not available.

bioaccumulative potential of components of the mixture				
name of substance	CAS No	BCF	log KOW	BOD5/COD
Sodium dodecyl sulfate	151-21-3		κ -2.03 (20 °C)	

12.4 mobility in soil

data are not available.

12.5 results of PBT and vPvB assessment

data are not available.

12.6 other adverse effects

data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods

sewage disposal-relevant information

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

waste treatment of containers/packagings

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

remarks

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

SECTION 14: Transport information

14.1 UN number	3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
technical name (hazardous ingredients)	Triton X-100
14.3 transport hazard class(es)	
class	9 (environmentally hazardous)
14.4 packing group	III (substance presenting low danger)
14.5 environmental hazards	hazardous to the aquatic environment

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revision: 2019-12-23

environmentally hazardous substance (aquatic environment) Triton X-100

14.6 special precautions for user

provisions for dangerous goods (ADR) should be complied within the premises.

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

the cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

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

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



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

International Maritime Dangerous Goods Code (IMDG)

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





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

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revision: 2019-12-23

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

SECTION 15: Regulatory information

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

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

indication of changes (revised safety data sheet)

section	former entry (text/value)	actual entry (text/value)	safety-rel- evant
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 Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
BCF	Bioconcentration factor

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abbr.	descriptions of used abbreviations
BOD	Biochemical Oxygen Demand
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
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
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
EmS	Emergency Schedule
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
log KOW	n-Octanol/water
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).

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revision: 2019-12-23

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.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

disclaimer

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

Lysis buffer iL1b

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 iL1b**
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.

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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

hazardous combustion products

nitrogen oxides (NO_x)

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 iL1b

version number: GHS 2.0
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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 iL1b

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)

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version number: GHS 2.0
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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
9.2 other information	there is no additional information

SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

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

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

there is no additional information.

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 iL1b

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 iL1b

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 iL1b

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 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 (CO₂)

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NO_x)

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
9.2 other information	there is no additional information

SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

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

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

there is no additional information.

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.

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	Elution Buffer iE1
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 (CO2)

unsuitable extinguishing media

water jet

Elution Buffer iE1

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

revision: 2019-12-23

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.

Elution Buffer iE1

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

revision: 2019-12-23

SECTION 8: Exposure controls/personal protection

8.1 control parameters

this information is not available.

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 ³	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.

Elution Buffer iE1

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

revision: 2019-12-23

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

other information	there is no additional information
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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
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revision: 2019-12-23

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
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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

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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.

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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.

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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.

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)

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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
9.2 other information	there is no additional information

SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

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

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

there is no additional information.

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.

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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.

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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. |

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.

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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)

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