




## OneDay ChIP kit

**C01010080**

### Flyleaf

Date of compilation: 2020-06-23

#### Bill of materials

Name of substance	Identifier	Number of pieces	Classification acc. to GHS	Pictograms	Page
ChIP Buffer 5x		1	Eye Dam. 1 / H318 Aquatic Chronic 2 / H411		2 – 11
Protease Inhibitor Mix		1			12 – 20
Ab binding beads		1	Flam. Liq. 2 / H225		21 – 31
rabbit IgG		1			32 – 40
5% BSA		1			41 – 48
DNA purifying slurry		1			49 – 56
proteinase K		1	Resp. Sens. 1 / H334		57 – 65
ChIP-seq grade water		2			66 – 73

## ChIP Buffer 5x

version number: GHS 1.0

date of compilation: 2020-04-10

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

#### 1.1 product identifier

trade name **ChIP Buffer 5x**  
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



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

### 2.3 other hazards

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

## SECTION 3: Composition/information on ingredients

### 3.1 substances

not relevant (mixture)

### 3.2 mixtures

description of the mixture

name of substance	identifier	wt%	classification acc. to GHS	pictograms
Triton X-100	CAS No 9002-93-1  EC No 618-344-0	≤ 5	Acute Tox. 4 / H302 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	
Nonylphenol, ethoxylated	CAS No 9016-45-9  EC No 500-024-6  REACH Reg. No 01-2119946371-39-xxxx	≤ 5	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Aquatic Chronic 2 / H411	

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.

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following eye contact

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

following ingestion

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

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

symptoms and effects are not known to date.

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

none

## SECTION 5: Firefighting measures

### 5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

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

hazardous combustion products

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

### 5.3 advice for firefighters

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

## SECTION 6: Accidental release measures

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

for non-emergency personnel

remove persons to safety.

for emergency responders

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

### 6.2 environmental precautions

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

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### 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.

### 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.

**ChIP Buffer 5x**

version number: GHS 1.0

date of compilation: 2020-04-10

**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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## ChIP Buffer 5x

version number: GHS 1.0

date of compilation: 2020-04-10

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

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

#### 10.2 chemical stability

see below "Conditions to avoid".

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

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

#### 10.5 incompatible materials

oxidisers

#### 10.6 hazardous decomposition products

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

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

causes serious eye damage.

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

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

specific target organ toxicity - repeated exposure

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

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version number: GHS 1.0

date of compilation: 2020-04-10

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

**SECTION 12: Ecological information**

**12.1 toxicity**

toxic to aquatic life with long lasting effects.

**12.2 persistence and degradability**

data are not available.

**12.3 bioaccumulative potential**

data are not available.

bioaccumulative potential of components of the mixture				
name of substance	CAS No	BCF	log KOW	BOD5/COD
Nonylphenol, ethoxylated	9016-45-9		3.7 (25 °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, Nonylphenol, ethoxylated

**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



**ChIP Buffer 5x**

version number: GHS 1.0

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environmentally hazardous substance (aquatic environment) Triton X-100, Nonylphenol, ethoxylated

**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
stowage category	A

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version number: GHS 1.0

date of compilation: 2020-04-10

**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**

**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
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)
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

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abbr.	descriptions of used abbreviations
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
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
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.
H411	Toxic to aquatic life with long lasting effects.

### disclaimer

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

## Protease Inhibitor Mix

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

revision: 2020-02-28

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

#### 1.1 product identifier

trade name	<b>Protease Inhibitor Mix</b>
registration number (REACH)	not relevant (mixture)
product code(s)	C12010010/C12010011/C12010012

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

relevant identified uses	for research use only, not for use in diagnostic or therapeutic procedures.
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#### 1.3 details of the supplier of the safety data sheet

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

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

#### 1.4 emergency telephone number

emergency information service	+32 4 364 20 50 this number is only available during the following of- fice hours: Mon-Fri 09:00 AM - 05:00 PM
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poison centre		
country	name	telephone
United Kingdom	National Poisons Information Service	111

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

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

#### 2.2 label elements

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

#### 2.3 other hazards

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

## Protease Inhibitor Mix

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

revision: 2020-02-28

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

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

symptoms and effects are not known to date.

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

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

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

hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

#### 5.3 advice for firefighters

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

## Protease Inhibitor Mix

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

revision: 2020-02-28

### SECTION 6: Accidental release measures

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

for non-emergency personnel  
remove persons to safety.

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

#### 6.2 environmental precautions

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

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

advice on how to contain a spill  
covering of drains

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

appropriate containment techniques  
use of adsorbent materials.

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

#### 6.4 reference to other sections

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

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

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

advice on general occupational hygiene

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

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

#### 7.3 specific end use(s)

see section 16 for a general overview.

**Protease Inhibitor Mix**

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

revision: 2020-02-28

**SECTION 8: Exposure controls/personal protection**

**8.1 control parameters**

this information is not available.

**8.2 exposure controls**

appropriate engineering controls  
general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

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

- other protection measures

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

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

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

**SECTION 9: Physical and chemical properties**

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

**appearance**

physical state	liquid
colour	colourless
odour	odourless

**other safety parameters**

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

## Protease Inhibitor Mix

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

revision: 2020-02-28

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

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

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

#### 10.2 chemical stability

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

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

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

#### 10.5 incompatible materials

oxidisers

#### 10.6 hazardous decomposition products

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



## Protease Inhibitor Mix

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

revision: 2020-02-28

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

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

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

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

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

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

specific target organ toxicity - repeated exposure

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

aspiration hazard

shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

#### 12.1 toxicity

shall not be classified as hazardous to the aquatic environment.

#### 12.2 persistence and degradability

data are not available.

#### 12.3 bioaccumulative potential

data are not available.

#### 12.4 mobility in soil

data are not available.

#### 12.5 results of PBT and vPvB assessment

data are not available.

## Protease Inhibitor Mix

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

revision: 2020-02-28

### 12.6 other adverse effects

data are not available.

## SECTION 13: Disposal considerations

### 13.1 waste treatment methods

sewage disposal-relevant information

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

waste treatment of containers/packagings

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

#### remarks

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

## SECTION 14: Transport information

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

### Information for each of the UN Model Regulations

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

not subject to ADR, RID and ADN.

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

not subject to IMDG.

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

not subject to ICAO-IATA.

## SECTION 15: Regulatory information

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

### 15.2 Chemical Safety Assessment

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

## Protease Inhibitor Mix

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

revision: 2020-02-28

### SECTION 16: Other information

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

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

## Protease Inhibitor Mix

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

revision: 2020-02-28

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

### abbreviations and acronyms

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

### key literature references and sources for data

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

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

### classification procedure

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

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

### disclaimer

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

## Ab binding beads

version number: GHS 1.0

date of compilation: 2020-04-10

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

#### 1.1 product identifier

trade name **Ab binding beads**  
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
2.6	flammable liquid	2	Flam. Liq. 2	H225

for full text of abbreviations: see SECTION 16.

the most important adverse physicochemical, human health and environmental effects  
the product is combustible and can be ignited by potential ignition sources.

#### 2.2 label elements

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

- signal word danger

- pictograms

GHS02



- hazard statements

H225 highly flammable liquid and vapour.

## Ab binding beads

version number: GHS 1.0

date of compilation: 2020-04-10

- precautionary statements
- P210 keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 keep container tightly closed.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- P370+P378 in case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
- P403+P235 store in a well-ventilated place. Keep cool.
- P501 dispose of contents/container to industrial combustion plant.

### 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
Ethanol	CAS No 64-17-5  EC No 200-578-6  index No 603-002-00-5  REACH Reg. No 01-2119457610-43-xxxx	15 – 20	Flam. Liq. 2 / H225	

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.

## Ab binding beads

version number: GHS 1.0

date of compilation: 2020-04-10

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

none

## SECTION 5: Firefighting measures

### 5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

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

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

hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

### 5.3 advice for firefighters

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

## SECTION 6: Accidental release measures

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

for non-emergency personnel

remove persons to safety.

for emergency responders

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

### 6.2 environmental precautions

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

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

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

### 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.

## Ab binding beads

version number: GHS 1.0

date of compilation: 2020-04-10

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

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

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

- specific notes/details

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

advice on general occupational hygiene

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

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

managing of associated risks

- explosive atmospheres

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

- flammability hazards

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

control of effects

protect against external exposure, such as

frost

- ventilation requirements

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

- packaging compatibilities

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

#### 7.3 specific end use(s)

see section 16 for a general overview.

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

occupational exposure limit values (Workplace Exposure Limits)											
country	name of agent	CAS No	identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Ceiling-C [ppm]	Ceiling-C [mg/m <sup>3</sup> ]	notation	source
GB	ethanol	64-17-5	WEL	1,000	1,920						EH40/2005

notation

Ceiling-C  
STEL

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

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

TWA

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



## Ab binding beads

version number: GHS 1.0

date of compilation: 2020-04-10

### 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	white
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

**Ab binding beads**

version number: GHS 1.0

date of compilation: 2020-04-10

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

**SECTION 10: Stability and reactivity**

**10.1 reactivity**

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

if heated:

risk of ignition

**10.2 chemical stability**

see below "Conditions to avoid".

**10.3 possibility of hazardous reactions**

no known hazardous reactions.

**10.4 conditions to avoid**

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

hints to prevent fire or explosion

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

**10.5 incompatible materials**

oxidisers

**10.6 hazardous decomposition products**

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

## Ab binding beads

version number: GHS 1.0

date of compilation: 2020-04-10

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

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

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

carcinogenicity

shall not be classified as carcinogenic.

reproductive toxicity

shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure

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

specific target organ toxicity - repeated exposure

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

aspiration hazard

shall not be classified as presenting an aspiration hazard.

### SECTION 12: Ecological information

#### 12.1 toxicity

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.

## Ab binding beads

version number: GHS 1.0

date of compilation: 2020-04-10

### SECTION 13: Disposal considerations

#### 13.1 waste treatment methods

waste treatment-relevant information

solvent reclamation/regeneration.

sewage disposal-relevant information

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

waste treatment of containers/packagings

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

#### remarks


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

### SECTION 14: Transport information

<b>14.1 UN number</b>	1170
<b>14.2 UN proper shipping name</b>	ETHANOL
<b>14.3 transport hazard class(es)</b>	
class	3 (flammable liquids)
<b>14.4 packing group</b>	II (substance presenting medium danger)
<b>14.5 environmental hazards</b>	non-environmentally hazardous acc. to the dangerous goods regulations
<b>14.6 special precautions for user</b>	
provisions for dangerous goods (ADR) should be complied within the premises.	
<b>14.7 transport in bulk according to Annex II of MARPOL and the IBC Code</b>	
the cargo is not intended to be carried in bulk.	

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

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

UN number	1170
proper shipping name	ETHANOL
class	3
classification code	F1
packing group	II
danger label(s)	3
	
special provisions (SP)	144, 601
excepted quantities (EQ)	E2
limited quantities (LQ)	1 L
transport category (TC)	2

## Ab binding beads

version number: GHS 1.0

date of compilation: 2020-04-10

tunnel restriction code (TRC)	D/E
hazard identification No	33
Emergency Action Code	2YE
<b>International Maritime Dangerous Goods Code (IMDG)</b>	
UN number	1170
proper shipping name	ETHANOL
class	3
marine pollutant	-
packing group	II
danger label(s)	3



special provisions (SP)	144
excepted quantities (EQ)	E2
limited quantities (LQ)	1 L
EmS	F-E, S-D
stowage category	A

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

UN number	1170
proper shipping name	Ethanol
class	3
packing group	II
danger label(s)	3



special provisions (SP)	A3, A58, A180
excepted quantities (EQ)	E2
limited quantities (LQ)	1 L

## SECTION 15: Regulatory information

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

### 15.2 Chemical Safety Assessment

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

## Ab binding beads

version number: GHS 1.0

date of compilation: 2020-04-10

### 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)
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> )
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
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).

## Ab binding beads

version number: GHS 1.0

date of compilation: 2020-04-10

### 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
H225	Highly flammable liquid and vapour.

### disclaimer

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

## rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

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

#### 1.1 product identifier

trade name	<b>rabbit IgG</b>
registration number (REACH)	not relevant (mixture)
product code(s)	C15410206

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

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

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

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

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

#### 1.4 emergency telephone number

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

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

### SECTION 2: Hazards identification

#### 2.1 classification of the substance or mixture

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

#### 2.2 label elements

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

#### 2.3 other hazards

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



## rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

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

symptoms and effects are not known to date.

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

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

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

hazardous combustion products

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

#### 5.3 advice for firefighters

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

## rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 6: Accidental release measures

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

for non-emergency personnel

remove persons to safety.

for emergency responders

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

#### 6.2 environmental precautions

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

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

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

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

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

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

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

advice on general occupational hygiene

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

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

control of effects

protect against external exposure, such as

frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

## rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

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

notation

Ceiling-C

STEL

TWA

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

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

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

#### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

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

- other protection measures

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

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

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

### SECTION 9: Physical and chemical properties

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

##### appearance

physical state	liquid
colour	colourless
odour	odourless

## rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

### other safety parameters

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

### partition coefficient

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

<b>9.2 other information</b>	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 | <b>UN number</b>  | not subject to transport regulations                                  |
| 14.2 | <b>UN proper shipping name</b>  | not relevant  |
| 14.3 | <b>transport hazard class(es)</b>   | none  |
| 14.4 | <b>packing group</b>  | not assigned to a packing group                                       |
| 14.5 | <b>environmental hazards</b>  | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 | <b>special precautions for user</b>                                       | there is no additional information.                                   |
| 14.7 | <b>transport in bulk according to Annex II of MARPOL and the IBC Code</b> | the cargo is not intended to be carried in bulk.                      |

### Information for each of the UN Model Regulations

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

not subject to ADR, RID and ADN.

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

not subject to IMDG.

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

not subject to ICAO-IATA.

## rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

### SECTION 15: Regulatory information

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

#### 15.2 Chemical Safety Assessment

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

### SECTION 16: Other information

#### abbreviations and acronyms

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

#### key literature references and sources for data

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

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

#### classification procedure

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

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

## rabbit IgG

version number: GHS 1.0

date of compilation: 2019-12-02

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### **disclaimer**

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



## 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)

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date of compilation: 2019-11-22

### 3.2 mixtures

#### SECTION 4: First aid measures

##### 4.1 description of first aid measures

###### general notes

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

###### following inhalation

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

###### following skin contact

wash with plenty of soap and water.

###### following eye contact

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

###### following ingestion

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

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

symptoms and effects are not known to date.

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

none

#### SECTION 5: Firefighting measures

##### 5.1 extinguishing media

###### suitable extinguishing media

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

###### unsuitable extinguishing media

water jet

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

###### hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

##### 5.3 advice for firefighters

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

#### SECTION 6: Accidental release measures

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

###### for non-emergency personnel

remove persons to safety.

###### for emergency responders

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

## 5% BSA

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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.

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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
<b>9.2 other information</b>	there is no additional information

**SECTION 10: Stability and reactivity**

**10.1 reactivity**

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

**10.2 chemical stability**

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

**10.3 possibility of hazardous reactions**

no known hazardous reactions.

**10.4 conditions to avoid**

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

**10.5 incompatible materials**

oxidisers

**10.6 hazardous decomposition products**

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

**SECTION 11: Toxicological information**

**11.1 information on toxicological effects**

test data are not available for the complete mixture.

classification procedure

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

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

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

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

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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

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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.



## DNA purifying slurry

version number: GHS 1.0

date of compilation: 2020-04-10

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

#### 1.1 product identifier

trade name **DNA purifying slurry**  
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

This mixture does not contain any potentially hazardous products.

description of the mixture

## DNA purifying slurry

version number: GHS 1.0

date of compilation: 2020-04-10

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

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

symptoms and effects are not known to date.

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

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

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

#### 5.3 advice for firefighters

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

### SECTION 6: Accidental release measures

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

for non-emergency personnel

remove persons to safety.

for emergency responders

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

#### 6.2 environmental precautions

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

## DNA purifying slurry

version number: GHS 1.0

date of compilation: 2020-04-10

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

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

### 6.4 reference to other sections

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

## SECTION 7: Handling and storage

### 7.1 precautions for safe handling

recommendations

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

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

advice on general occupational hygiene

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

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

control of effects

protect against external exposure, such as

frost

### 7.3 specific end use(s)

see section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 control parameters

this information is not available.

### 8.2 exposure controls

appropriate engineering controls

general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

**DNA purifying slurry**

version number: GHS 1.0

date of compilation: 2020-04-10

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	white
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 purifying slurry

version number: GHS 1.0

date of compilation: 2020-04-10

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

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

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

#### 10.2 chemical stability

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

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

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

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

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

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

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

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

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

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.

## DNA purifying slurry

version number: GHS 1.0

date of compilation: 2020-04-10

### 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 purifying slurry**

version number: GHS 1.0

date of compilation: 2020-04-10

**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 purifying slurry

version number: GHS 1.0

date of compilation: 2020-04-10

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.

## proteinase K

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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 (CO<sub>2</sub>)

unsuitable extinguishing media

water jet

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

#### 5.3 advice for firefighters

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

### SECTION 6: Accidental release measures

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

for non-emergency personnel

remove persons to safety.

for emergency responders

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

#### 6.2 environmental precautions

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

#### 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

<b>9.2 other information</b>	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 | <b>UN number</b>  | not subject to transport regulations                                  |
| 14.2 | <b>UN proper shipping name</b>  | not relevant  |
| 14.3 | <b>transport hazard class(es)</b>   | none  |
| 14.4 | <b>packing group</b>  | not assigned to a packing group                                       |
| 14.5 | <b>environmental hazards</b>  | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 | <b>special precautions for user</b>                                       | there is no additional information.                                   |
| 14.7 | <b>transport in bulk according to Annex II of MARPOL and the IBC Code</b> | the cargo is not intended to be carried in bulk.                      |

### Information for each of the UN Model Regulations

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

not subject to ADR, RID and ADN.

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

not subject to IMDG.

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

not subject to ICAO-IATA.

## 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.

**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	<b>ChIP-seq grade water</b>
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 <sub>2</sub> O
molar mass	18.02 g/mol

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

##### general notes

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

##### following inhalation

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

##### following skin contact

wash with plenty of soap and water.

##### following eye contact

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

##### following ingestion

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

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

symptoms and effects are not known to date.

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

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

##### suitable extinguishing media

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

##### unsuitable extinguishing media

water jet

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

#### 5.3 advice for firefighters

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

## ChIP-seq grade water

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

revision: 2019-12-23

### SECTION 6: Accidental release measures

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

for non-emergency personnel  
remove persons to safety.

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

#### 6.2 environmental precautions

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

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

advice on how to contain a spill  
covering of drains

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

appropriate containment techniques  
use of adsorbent materials.

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

#### 6.4 reference to other sections

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

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

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

advice on general occupational hygiene

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

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

control of effects

protect against external exposure, such as  
frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

## ChIP-seq grade water

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

revision: 2019-12-23

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls  
general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

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

- other protection measures

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

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

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

### SECTION 9: Physical and chemical properties

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

##### appearance

physical state	liquid
colour	colourless
odour	odourless

##### other safety parameters

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

## ChIP-seq grade water

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

revision: 2019-12-23

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

### SECTION 10: Stability and reactivity

#### 10.1 reactivity

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

#### 10.2 chemical stability

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

#### 10.3 possibility of hazardous reactions

no known hazardous reactions.

#### 10.4 conditions to avoid

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

#### 10.5 incompatible materials

there is no additional information.

#### 10.6 hazardous decomposition products

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

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### 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.

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### SECTION 13: Disposal considerations

#### 13.1 waste treatment methods

waste treatment-relevant information

recycling/reclamation of other inorganic materials.

sewage disposal-relevant information

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

waste treatment of containers/packagings

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

#### remarks

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

### SECTION 14: Transport information

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

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

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

not subject to ADR, RID and ADN.

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

not subject to IMDG.

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

not subject to ICAO-IATA.

### 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.



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**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 <sub>2</sub> )	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.