

## Tissue Nuclei Extraction for ATAC-seq

**C01080003/C01080004**

### Flyleaf

Date of compilation: 2022-02-14

#### Bill of materials

Name of substance	Identifier	Number of pieces	Classification acc. to GHS	Pictograms	Page
lysis buffer 1		1			2 - 9
lysis buffer 2		1	Aquatic Chronic 3 / H412		10 - 19
Nuclei Isolation Buffer 1		1			20 - 27
Nuclei Isolation Buffer 2		1			28 - 36
Nuclei Isolation Buffer 3		1			37 - 45

## lysis buffer 1

version number: GHS 1.0

date of compilation: 2022-01-18

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

#### 1.1 product identifier

trade name	<b>lysis buffer 1</b>
registration number (REACH)	not relevant (mixture)
product code(s)	K18441001

#### 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

of no significance

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### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This mixture does not contain any potentially hazardous products.

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

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

symptoms and effects are not known to date.

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

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (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.

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### SECTION 6: Accidental release measures

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

for non-emergency personnel

remove persons to safety.

for emergency responders

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

#### 6.2 environmental precautions

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

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

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

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

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

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

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

advice on general occupational hygiene

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

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

control of effects

protect against external exposure, such as

frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

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### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls  
general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

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

- other protection measures

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

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

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

### SECTION 9: Physical and chemical properties

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

physical state	liquid
colour	colourless
odour	characteristic
melting point/freezing point	not determined
boiling point or initial boiling point and boiling range	not determined
flammability	non-combustible
lower and upper explosion limit	not determined
flash point	not determined
auto-ignition temperature	not determined
decomposition temperature	not relevant
pH (value)	not determined

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kinematic viscosity	not determined
solubility(ies)	not determined

partition coefficient

partition coefficient n-octanol/water (log value)	this information is not available
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vapour pressure	not determined
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density and/or relative density

density	not determined
relative vapour density	information on this property is not available

particle characteristics	not relevant (liquid)
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### 9.2 other information

information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
other safety characteristics	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 hazard classes as defined in Regulation (EC) No 1272/2008

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.

#### 11.2 information on other hazards

there is no additional information.

### 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.

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### 12.5 results of PBT and vPvB assessment

data are not available.

### 12.6 endocrine disrupting properties

information on this property is not available.

### 12.7 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 or ID 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  |
| 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 maritime transport in bulk according to IMO instruments | 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) - additional information**

not subject to ADR, RID and ADN.

#### **International Maritime Dangerous Goods Code (IMDG) - additional information**

not subject to IMDG.

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

not subject to ICAO-IATA.

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### SECTION 15: Regulatory information

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

#### 15.2 Chemical Safety Assessment

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

### SECTION 16: Other information

#### 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 relatif au transport international des marchandises dangereuses par route (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
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 2020/878/EU.

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

#### classification procedure

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

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

#### disclaimer

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

## lysis buffer 2

version number: GHS 1.0

date of compilation: 2022-01-18

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

#### 1.1 product identifier

trade name	<b>lysis buffer 2</b>
registration number (REACH)	not relevant (mixture)
product code(s)	K18441002

#### 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)

section	hazard class	category	hazard class and category	hazard statement
4.1C	hazardous to the aquatic environment - chronic hazard	3	Aquatic Chronic 3	H412

for full text of abbreviations: see SECTION 16.

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

#### 2.2 label elements

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

- signal word	not required
- pictograms	not required
- hazard statements	
H412	harmful to aquatic life with long lasting effects.

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- precautionary statements  
P273 avoid release to the environment.  
P501 dispose of contents/container to industrial combustion plant.

**2.3 other hazards**

of no significance

**SECTION 3: Composition/information on ingredients**

**3.1 substances**

not relevant (mixture)

**3.2 mixtures**

description of the mixture

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

name of substance	Specific Conc. Limits	M-Factors	ATE	exposure route
Triton X-100	-	-	500 mg/kg	oral

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

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date of compilation: 2022-01-18

### 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.

#### 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.

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date of compilation: 2022-01-18

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

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

advice on general occupational hygiene

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

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

control of effects

protect against external exposure, such as  
frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

occupational exposure limit values (Workplace Exposure Limits)											
country	name of agent	CAS No	identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Ceiling-C [ppm]	Ceiling-C [mg/m <sup>3</sup> ]	notation	source
GB	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.

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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

physical state	liquid
colour	colourless
odour	characteristic
melting point/freezing point	not determined
boiling point or initial boiling point and boiling range	not determined
flammability	this material is combustible, but will not ignite readily
lower and upper explosion limit	not determined
flash point	not determined
auto-ignition temperature	not determined
decomposition temperature	not relevant
pH (value)	not determined
kinematic viscosity	not determined
solubility(ies)	not determined

partition coefficient

partition coefficient n-octanol/water (log value)	this information is not available
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vapour pressure	not determined
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density and/or relative density

density	not determined
relative vapour density	information on this property is not available

particle characteristics	not relevant (liquid)
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**9.2 other information**

information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
other safety characteristics	there is no additional information

**SECTION 10: Stability and reactivity**

**10.1 reactivity**

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

**10.2 chemical stability**

see below "Conditions to avoid".

**10.3 possibility of hazardous reactions**

no known hazardous reactions.

**10.4 conditions to avoid**

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

**10.5 incompatible materials**

oxidisers

**10.6 hazardous decomposition products**

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

**SECTION 11: Toxicological information**

**11.1 information on hazard classes as defined in Regulation (EC) No 1272/2008**

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.

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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.

### 11.2 information on other hazards

there is no additional information.

## SECTION 12: Ecological information

### 12.1 toxicity

harmful to aquatic life with long lasting effects.

### 12.2 persistence and degradability

data are not available.

### 12.3 bioaccumulative potential

data are not available.

### 12.4 mobility in soil

data are not available.

### 12.5 results of PBT and vPvB assessment

data are not available.

### 12.6 endocrine disrupting properties

information on this property is not available.

### 12.7 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.

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**SECTION 14: Transport information**

- 14.1 UN number or ID number** not assigned
- 14.2 UN proper shipping name** not relevant
- 14.3 transport hazard class(es)** not assigned
- 14.4 packing group** not assigned
- 14.5 environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 special precautions for user**  
there is no additional information.
- 14.7 maritime transport in bulk according to IMO instruments**  
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) - additional information**

not subject to ADR. not subject to RID.

**International Maritime Dangerous Goods Code (IMDG) - additional information**

not subject to IMDG.

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

not subject to ICAO-IATA.

**SECTION 15: Regulatory information**

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

**SECTION 16: Other information**

**abbreviations and acronyms**

abbr.	descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord relatif au transport international des marchandises dangereuses par route (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
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value

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abbr.	descriptions of used abbreviations
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
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
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)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
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 2020/878/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).

## lysis buffer 2

version number: GHS 1.0

date of compilation: 2022-01-18

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

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

### disclaimer

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

## Nuclei Isolation Buffer 1

version number: GHS 1.0

date of compilation: 2022-01-18

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

#### 1.1 product identifier

trade name

**Nuclei Isolation Buffer 1**

registration number (REACH)

not relevant (mixture)

product code(s)

K18441003

#### 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

of no significance

## Nuclei Isolation Buffer 1

version number: GHS 1.0

date of compilation: 2022-01-18

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This mixture does not contain any potentially hazardous products.

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

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

symptoms and effects are not known to date.

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

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

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

hazardous combustion products

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

## Nuclei Isolation Buffer 1

version number: GHS 1.0

date of compilation: 2022-01-18

### SECTION 6: Accidental release measures

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

for non-emergency personnel

remove persons to safety.

for emergency responders

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

#### 6.2 environmental precautions

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

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

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

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

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

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

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

advice on general occupational hygiene

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

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

control of effects

protect against external exposure, such as

frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

## Nuclei Isolation Buffer 1

version number: GHS 1.0

date of compilation: 2022-01-18

### SECTION 8: Exposure controls/personal protection

#### 8.1 control parameters

this information is not available.

#### 8.2 exposure controls

appropriate engineering controls  
general ventilation.

individual protection measures (personal protective equipment)

eye/face protection

wear eye/face protection.

skin protection

- hand protection

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

- other protection measures

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

respiratory protection

in case of inadequate ventilation wear respiratory protection.

environmental exposure controls

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

### SECTION 9: Physical and chemical properties

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

physical state	liquid
colour	colourless
odour	characteristic
melting point/freezing point	not determined
boiling point or initial boiling point and boiling range	not determined
flammability	this material is combustible, but will not ignite readily
lower and upper explosion limit	not determined
flash point	not determined
auto-ignition temperature	not determined
decomposition temperature	not relevant
pH (value)	not determined

**Nuclei Isolation Buffer 1**

version number: GHS 1.0

date of compilation: 2022-01-18

kinematic viscosity	not determined
solubility(ies)	not determined

partition coefficient

partition coefficient n-octanol/water (log value)	this information is not available
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vapour pressure	not determined
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density and/or relative density

density	not determined
relative vapour density	information on this property is not available

particle characteristics	not relevant (liquid)
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**9.2 other information**

information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
other safety characteristics	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.

## Nuclei Isolation Buffer 1

version number: GHS 1.0

date of compilation: 2022-01-18

### SECTION 11: Toxicological information

#### 11.1 information on hazard classes as defined in Regulation (EC) No 1272/2008

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.

#### 11.2 information on other hazards

there is no additional information.

### 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.

## Nuclei Isolation Buffer 1

version number: GHS 1.0

date of compilation: 2022-01-18

### 12.5 results of PBT and vPvB assessment

data are not available.

### 12.6 endocrine disrupting properties

information on this property is not available.

### 12.7 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 or ID 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
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>maritime transport in bulk according to IMO instruments</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) - additional information**

not subject to ADR, RID and ADN.

#### **International Maritime Dangerous Goods Code (IMDG) - additional information**

not subject to IMDG.

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

not subject to ICAO-IATA.

## Nuclei Isolation Buffer 1

version number: GHS 1.0

date of compilation: 2022-01-18

### 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 relatif au transport international des marchandises dangereuses par route (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
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 2020/878/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.

## Nuclei Isolation Buffer 2

version number: GHS 1.0

date of compilation: 2022-01-18

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

#### 1.1 product identifier

trade name	<b>Nuclei Isolation Buffer 2</b>
registration number (REACH)	not relevant (mixture)
product code(s)	K18441004

#### 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

of no significance

## Nuclei Isolation Buffer 2

version number: GHS 1.0

date of compilation: 2022-01-18

### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This mixture does not contain any potentially hazardous products.

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

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

symptoms and effects are not known to date.

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

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

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

hazardous combustion products

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

## Nuclei Isolation Buffer 2

version number: GHS 1.0

date of compilation: 2022-01-18

### SECTION 6: Accidental release measures

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

for non-emergency personnel

remove persons to safety.

for emergency responders

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

#### 6.2 environmental precautions

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

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

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

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

### SECTION 7: Handling and storage

#### 7.1 precautions for safe handling

recommendations

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

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

advice on general occupational hygiene

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

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

control of effects

protect against external exposure, such as

frost

#### 7.3 specific end use(s)

see section 16 for a general overview.

**Nuclei Isolation Buffer 2**

version number: GHS 1.0

date of compilation: 2022-01-18

**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

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)

**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**

physical state	liquid
colour	colourless
odour	characteristic
melting point/freezing point	not determined
boiling point or initial boiling point and boiling range	not determined

**Nuclei Isolation Buffer 2**

version number: GHS 1.0

date of compilation: 2022-01-18

flammability	this material is combustible, but will not ignite readily
lower and upper explosion limit	not determined
flash point	not determined
auto-ignition temperature	not determined
decomposition temperature	not relevant
pH (value)	not determined
kinematic viscosity	not determined
solubility(ies)	not determined

partition coefficient

partition coefficient n-octanol/water (log value)	this information is not available
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vapour pressure	not determined
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density and/or relative density

density	not determined
relative vapour density	information on this property is not available

particle characteristics	not relevant (liquid)
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**9.2 other information**

information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
other safety characteristics	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.

## Nuclei Isolation Buffer 2

version number: GHS 1.0

date of compilation: 2022-01-18

### 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 hazard classes as defined in Regulation (EC) No 1272/2008

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.

### 11.2 information on other hazards

there is no additional information.

## Nuclei Isolation Buffer 2

version number: GHS 1.0

date of compilation: 2022-01-18

### 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 endocrine disrupting properties

information on this property is not available.

#### 12.7 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 or ID 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

#### 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 maritime transport in bulk according to IMO instruments

the cargo is not intended to be carried in bulk.

## Nuclei Isolation Buffer 2

version number: GHS 1.0

date of compilation: 2022-01-18

### Information for each of the UN Model Regulations

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

not subject to ADR, RID and ADN.

#### **International Maritime Dangerous Goods Code (IMDG) - additional information**

not subject to IMDG.

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

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**

<b>abbr.</b>	<b>descriptions of used abbreviations</b>
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 relatif au transport international des marchandises dangereuses par route (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
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

## Nuclei Isolation Buffer 2

version number: GHS 1.0

date of compilation: 2022-01-18

abbr.	descriptions of used abbreviations
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 2020/878/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.

## Nuclei Isolation Buffer 3

version number: GHS 1.0

date of compilation: 2022-01-18

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

#### 1.1 product identifier

trade name	<b>Nuclei Isolation Buffer 3</b>
registration number (REACH)	not relevant (mixture)
product code(s)	K18441005

#### 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

of no significance

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### SECTION 3: Composition/information on ingredients

#### 3.1 substances

not relevant (mixture)

#### 3.2 mixtures

description of the mixture

This mixture does not contain any potentially hazardous products.

### SECTION 4: First aid measures

#### 4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

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

symptoms and effects are not known to date.

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

none

### SECTION 5: Firefighting measures

#### 5.1 extinguishing media

suitable extinguishing media

water spray, BC-powder, carbon dioxide (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.

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### SECTION 6: Accidental release measures

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

for non-emergency personnel

remove persons to safety.

for emergency responders

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

#### 6.2 environmental precautions

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

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

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

#### 6.4 reference to other sections

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.

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**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

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)

**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**

physical state	liquid
colour	colourless
odour	characteristic
melting point/freezing point	not determined
boiling point or initial boiling point and boiling range	not determined

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flammability	this material is combustible, but will not ignite readily
lower and upper explosion limit	not determined
flash point	not determined
auto-ignition temperature	not determined
decomposition temperature	not relevant
pH (value)	not determined
kinematic viscosity	not determined
solubility(ies)	not determined

partition coefficient

partition coefficient n-octanol/water (log value)	this information is not available
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vapour pressure	not determined
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density and/or relative density

density	not determined
relative vapour density	information on this property is not available

particle characteristics	not relevant (liquid)
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### 9.2 other information

information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
other safety characteristics	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.

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### 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 hazard classes as defined in Regulation (EC) No 1272/2008

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.

### 11.2 information on other hazards

there is no additional information.

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### 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 endocrine disrupting properties**  
information on this property is not available.
- 12.7 other adverse effects**  
data are not available.

### SECTION 13: Disposal considerations

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

### SECTION 14: Transport information

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

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### Information for each of the UN Model Regulations

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

not subject to ADR, RID and ADN.

#### **International Maritime Dangerous Goods Code (IMDG) - additional information**

not subject to IMDG.

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

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**

<b>abbr.</b>	<b>descriptions of used abbreviations</b>
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 relatif au transport international des marchandises dangereuses par route (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
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

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abbr.	descriptions of used abbreviations
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 2020/878/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.