## Bill of materials

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Identifier</th>
<th>Number of pieces</th>
<th>Classification acc. to GHS</th>
<th>Pictograms</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ChIP-seq grade water</td>
<td></td>
<td>1</td>
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<td></td>
<td>2 – 9</td>
</tr>
<tr>
<td>hMeDIP buffer H1</td>
<td></td>
<td>1</td>
<td>Aquatic Chronic 3 / H412</td>
<td></td>
<td>10 – 19</td>
</tr>
<tr>
<td>hmeDNA control</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>20 – 27</td>
</tr>
<tr>
<td>meDNA control</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>28 – 35</td>
</tr>
<tr>
<td>unDNA control</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>36 – 43</td>
</tr>
<tr>
<td>5-hmC monoclonal antibody (mouse)</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>44 – 51</td>
</tr>
<tr>
<td>Mouse IgG</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>52 – 60</td>
</tr>
<tr>
<td>DiaMag anti-mouse IgG coated magnetic beads</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>61 – 68</td>
</tr>
<tr>
<td>hMeDIP buffer H2</td>
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<td>69 – 76</td>
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<td>77 – 84</td>
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<tr>
<td>DNA Isolation Buffer (DIB)</td>
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<td>85 – 92</td>
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<tr>
<td>proteinase K</td>
<td></td>
<td>1</td>
<td>Resp. Sens. 1 / H334</td>
<td>🟢</td>
<td>93 – 101</td>
</tr>
<tr>
<td>hmeDNA primer pair</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>102 – 109</td>
</tr>
<tr>
<td>meDNA primer pair</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>110 – 117</td>
</tr>
<tr>
<td>unDNA primer pair</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>118 – 125</td>
</tr>
<tr>
<td>Mouse Sfi1 primer pair</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>126 – 133</td>
</tr>
</tbody>
</table>
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 product identifier

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

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

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

1.3 details of the supplier of the safety data sheet

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

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

1.4 emergency telephone number

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

<table>
<thead>
<tr>
<th>country</th>
<th>name</th>
<th>telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service</td>
<td>111</td>
</tr>
</tbody>
</table>

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.
SECTION 3: Composition/information on ingredients

3.1 substances

<table>
<thead>
<tr>
<th>name of substance</th>
<th>ChIP-seq grade water</th>
</tr>
</thead>
<tbody>
<tr>
<td>identifiers</td>
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<tr>
<td>CAS No</td>
<td>7732-18-5</td>
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<tr>
<td>molecular formula</td>
<td>H2O</td>
</tr>
<tr>
<td>molar mass</td>
<td>18.02 g/mol</td>
</tr>
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</table>

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 ad-vice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

water spray, alcohol resistant foam, BC-powder, carbon dioxide (CO2)

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

5.3 advice for firefighters

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

<table>
<thead>
<tr>
<th>appearance</th>
<th></th>
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<tbody>
<tr>
<td>physical state</td>
<td>liquid</td>
</tr>
<tr>
<td>colour</td>
<td>colourless</td>
</tr>
<tr>
<td>odour</td>
<td>odourless</td>
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</tbody>
</table>

other safety parameters

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>pH (value)</td>
<td>not determined</td>
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<tr>
<td>melting point/freezing point</td>
<td>0 °C</td>
</tr>
<tr>
<td>initial boiling point and boiling range</td>
<td>100 °C</td>
</tr>
<tr>
<td>flash point</td>
<td>not determined</td>
</tr>
<tr>
<td>evaporation rate</td>
<td>not determined</td>
</tr>
<tr>
<td>flammability (solid, gas)</td>
<td>not relevant, (fluid)</td>
</tr>
</tbody>
</table>
### Explosive and Oxidising Properties

- **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

- **Water solubility**: Miscible in any proportion

### Partition Coefficient

- **n-octanol/water (log KOW)**: This information is not available

### Auto-ignition Temperature

- **Auto-ignition temperature**: Not determined

### Viscosity

- **Viscosity**: Not determined

### Explosive Properties

- **Explosive properties**: None

### Oxidising Properties

- **Oxidising properties**: None

### Other Information

- **Solubility(ies)**: Miscible in any proportion
- **Partition coefficient**: This information is not available
- **Auto-ignition temperature**: Not determined
- **Viscosity**: Not determined
- **Explosive properties**: None
- **Oxidising properties**: None
- **9.2 other information**: There is no additional information

### SECTION 10: Stability and Reactivity

**10.1 Reactivity**

Concerning incompatibility: see below “Conditions to avoid” and “Incompatible materials”.

**10.2 Chemical Stability**

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

**10.3 Possibility of Hazardous Reactions**

No known hazardous reactions.

**10.4 Conditions to Avoid**

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

**10.5 Incompatible Materials**

There is no additional information.

**10.6 Hazardous Decomposition Products**

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.
SECTION 11: Toxicological information

11.1 information on toxicological effects

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.
germin cell mutagenicity
shall not be classified as germ cell mutagenic.
carcinogenicity
shall not be classified as carcinogenic.
reproductive toxicity
shall not be classified as a reproductive toxicant.
specific target organ toxicity - single exposure
shall not be classified as a specific target organ toxicant [single exposure].
specific target organ toxicity - repeated exposure
shall not be classified as a specific target organ toxicant [repeated exposure].
aspiration hazard
shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 toxicity
shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability
data are not available.

12.3 bioaccumulative potential
data are not available.

12.4 mobility in soil
data are not available.

12.5 results of PBT and vPvB assessment
data are not available.

12.6 other adverse effects
data are not available.
SECTION 13: Disposal considerations

13.1 waste treatment methods
waste treatment-relevant information
recycling/reclamation of other inorganic materials.

sewage disposal-relevant information
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings
completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

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

SECTION 14: Transport information

14.1 UN number
not subject to transport regulations

14.2 UN proper shipping name
not relevant

14.3 transport hazard class(es)
none

14.4 packing group
not assigned to a packing group

14.5 environmental hazards
non-environmentally hazardous acc. to the dangerous goods regulations

14.6 special precautions for user
there is no additional information.

14.7 transport in bulk according to Annex II of MARPOL and the IBC Code
the cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations
transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)
not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG)
not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)
not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

15.2 Chemical Safety Assessment
no Chemical Safety Assessment has been carried out for this substance.
### SECTION 16: Other information

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

<table>
<thead>
<tr>
<th>section</th>
<th>former entry (text/value)</th>
<th>actual entry (text/value)</th>
<th>safety-relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>suitable extinguishing media: not applicable</td>
<td>suitable extinguishing media: water spray, alcohol resistant foam, BC-powder, carbon dioxide (CO2)</td>
<td>yes</td>
</tr>
<tr>
<td>5.1</td>
<td>unsuitable extinguishing media: not applicable</td>
<td>unsuitable extinguishing media: water jet</td>
<td>yes</td>
</tr>
</tbody>
</table>

#### abbreviations and acronyms

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

#### key literature references and sources for data


#### disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 product identifier
- trade name: hMeDIP buffer H1
- 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 office hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre

<table>
<thead>
<tr>
<th>country</th>
<th>name</th>
<th>telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service</td>
<td>111</td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

2.1 classification of the substance or mixture
classification according to Regulation (EC) No 1272/2008 (CLP)

<table>
<thead>
<tr>
<th>section</th>
<th>hazard class</th>
<th>category</th>
<th>hazard class and category</th>
<th>hazard statement</th>
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<tbody>
<tr>
<td>4.1C</td>
<td>hazardous to the aquatic environment - chronic hazard</td>
<td>3</td>
<td>Aquatic Chronic 3</td>
<td>H412</td>
</tr>
</tbody>
</table>

for full text of abbreviations: see SECTION 16.

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

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

- signal word: not required
- pictograms: not required
- hazard statements
  - H412: harmful to aquatic life with long lasting effects.
- precautionary statements
  - P273: avoid release to the environment.
  - P501: dispose of contents/container to industrial combustion plant.
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

<table>
<thead>
<tr>
<th>name of substance</th>
<th>identifier</th>
<th>wt%</th>
<th>classification acc. to GHS</th>
<th>pictograms</th>
</tr>
</thead>
</table>
| Disodium hydrogenorthophosphate | CAS No 7558-79-4  
EC No 231-448-7  
REACH Reg. No 01-2119489797-11-xxxx | ≤ 2 | Acute Tox. 3 / H331 | ![Pictogram] |
| Sodium dihydrogenorthophosphate | CAS No 7558-80-7  
EC No 231-449-2  
REACH Reg. No 01-2119489796-13-xxxx | ≤ 2 | Acute Tox. 3 / H331 | ![Pictogram] |
| 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 | ![Pictogram] |

for full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 description of first aid measures

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

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

following skin contact
wash with plenty of soap and water.

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

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

4.2 most important symptoms and effects, both acute and delayed
symptoms and effects are not known to date.
4.3 indication of any immediate medical attention and special treatment needed
none

SECTION 5: Firefighting measures

5.1 extinguishing media
suitable extinguishing media
  water spray, BC-powder, carbon dioxide (CO2)
unsuitable extinguishing media
  water jet

5.2 special hazards arising from the substance or mixture

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

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures
for non-emergency personnel
  remove persons to safety.
for emergency responders
  wear breathing apparatus if exposed to vapours/dust/spray/gases.

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

6.3 methods and material for containment and cleaning up
  advice on how to contain a spill
    covering of drains
  advice on how to clean up a spill
    wipe up with absorbent material [e.g. cloth, fleece]. collect spillage: sawdust, kieselgur (diatomite), sand, universal binder
  appropriate containment techniques
    use of adsorbent materials.
other information relating to spills and releases
  place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections
  personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.
SECTION 7: Handling and storage

7.1 precautions for safe handling

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

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

7.2 conditions for safe storage, including any incompatibilities

control of effects
  protect against external exposure, such as
  frost

7.3 specific end use(s)

see section 16 for a general overview.

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

<table>
<thead>
<tr>
<th>physical state</th>
<th>liquid</th>
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<tbody>
<tr>
<td>colour</td>
<td>colourless</td>
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<td>odour</td>
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#### other safety parameters

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

#### partition coefficient

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

#### other information

<table>
<thead>
<tr>
<th>auto-ignition temperature</th>
<th>not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>viscosity</td>
<td>not determined</td>
</tr>
<tr>
<td>explosive properties</td>
<td>none</td>
</tr>
<tr>
<td>oxidising properties</td>
<td>none</td>
</tr>
</tbody>
</table>

### 9.2 other information

there is no additional information
SECTION 10: Stability and reactivity

10.1 reactivity
concerning incompatibility: see below “Conditions to avoid” and “Incompatible materials”.

10.2 chemical stability
see below "Conditions to avoid".

10.3 possibility of hazardous reactions
no known hazardous reactions.

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

10.5 incompatible materials
there is no additional information.

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

SECTION 11: Toxicological information

11.1 information on toxicological effects
test data are not available for the complete mixture.

classification procedure
the method for classification of the mixture is based on ingredients of the mixture [additivity formula].

classification according to GHS (1272/2008/EC, CLP)
acute toxicity
shall not be classified as acutely toxic.

skin corrosion/irritation
shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation
shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation
shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity
shall not be classified as germ cell mutagenic.

carcinogenicity
shall not be classified as carcinogenic.

reproductive toxicity
shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure
shall not be classified as a specific target organ toxicant [single exposure].

specific target organ toxicity - repeated exposure
shall not be classified as a specific target organ toxicant [repeated exposure].
aspiration hazard
shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 toxicity
harmful to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>name of substance</th>
<th>CAS No</th>
<th>endpoint</th>
<th>value</th>
<th>species</th>
<th>exposure time</th>
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</thead>
<tbody>
<tr>
<td>Disodium hydrogen ortho-phosphate</td>
<td>7558-79-4</td>
<td>EC50</td>
<td>$&gt;1,000\ \text{mg/l}$</td>
<td>microorganisms</td>
<td>3 h</td>
</tr>
<tr>
<td>Sodium dihydrogen ortho-phosphate</td>
<td>7558-80-7</td>
<td>EC50</td>
<td>$1,000\ \text{mg/l}$</td>
<td>microorganisms</td>
<td>3 h</td>
</tr>
</tbody>
</table>

12.2 persistence and degradability
data are not available.

12.3 bioaccumulative potential
data are not available.

12.4 mobility in soil
data are not available.

12.5 results of PBT and vPvB assessment
data are not available.

12.6 other adverse effects
data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods
sewage disposal–relevant information
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.
waste treatment of containers/packagings
completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

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

SECTION 14: Transport information

14.1 UN number
not subject to transport regulations

14.2 UN proper shipping name
not relevant

14.3 transport hazard class(es)
not assigned

14.4 packing group
not assigned

14.5 environmental hazards
non-environmentally hazardous acc. to the dangerous goods regulations
14.6 special precautions for user
there is no additional information.

14.7 transport in bulk according to Annex II of MARPOL and the IBC Code
the cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations
transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)
not subject to ADR. not subject to RID.

European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)
identifier number 9006
proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
class 9
number of cones/blue lights 0

International Maritime Dangerous Goods Code (IMDG)
not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)
not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

15.2 Chemical Safety Assessment
chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

abbreviations and acronyms

<table>
<thead>
<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox.</td>
<td>Acute toxicity</td>
</tr>
<tr>
<td>ADN</td>
<td>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]</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route [European Agreement concerning the International Carriage of Dangerous Goods by Road]</td>
</tr>
<tr>
<td>Aquatic Acute</td>
<td>Hazardous to the aquatic environment - acute hazard</td>
</tr>
<tr>
<td>Aquatic Chronic</td>
<td>Hazardous to the aquatic environment - chronic hazard</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service [service that maintains the most comprehensive list of chemical substances]</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations [see IATA/DGR]</td>
</tr>
<tr>
<td>EC50</td>
<td>Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval</td>
</tr>
<tr>
<td>EC No</td>
<td>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]</td>
</tr>
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</table>
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

hMeDIP buffer H1

version number: GHS 1.0
date of compilation: 2020-03-31

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

key literature references and sources for data

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)

<table>
<thead>
<tr>
<th>code</th>
<th>text</th>
</tr>
</thead>
<tbody>
<tr>
<td>H302</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>H331</td>
<td>Toxic if inhaled.</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life.</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>H412</td>
<td>Harmful to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>
disclaimer
this information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 product identifier
trade name hmeDNA control
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 office hours: Mon-Fri 09:00 AM - 05:00 PM

<table>
<thead>
<tr>
<th>poison centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>country</td>
</tr>
<tr>
<td>United Kingdom</td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

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

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

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

SECTION 3: Composition/information on ingredients

3.1 substances
not relevant (mixture)

3.2 mixtures
description of the mixture
This mixture does not contain any potentially hazardous products.
SECTION 4: First aid measures

4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NOx)

5.3 advice for firefighters

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

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

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

6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.
6.3 methods and material for containment and cleaning up

advice on how to contain a spill
covering of drains
advice on how to clean up a spill
wipe up with absorbent material [e.g. cloth, fleece]. collect spillage: sawdust, kieselgur (diatomite), sand, universal binder
appropriate containment techniques
use of adsorbent materials.
other information relating to spills and releases
place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections
hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 precautions for safe handling
recommendations
- measures to prevent fire as well as aerosol and dust generation
  use local and general ventilation. use only in well-ventilated areas.
advice on general occupational hygiene
  wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

7.2 conditions for safe storage, including any incompatibilities
control of effects
  protect against external exposure, such as frost

7.3 specific end use(s)
  see section 16 for a general overview.

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

<table>
<thead>
<tr>
<th>property</th>
<th>value</th>
</tr>
</thead>
<tbody>
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<td>appearance</td>
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<tr>
<td>physical state</td>
<td>liquid</td>
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<tr>
<td>colour</td>
<td>colourless</td>
</tr>
<tr>
<td>odour</td>
<td>odourless</td>
</tr>
<tr>
<td>other safety parameters</td>
<td></td>
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<tr>
<td>pH (value)</td>
<td>not determined</td>
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<tr>
<td>melting point/freezing point</td>
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<td>initial boiling point and boiling range</td>
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<tr>
<td>flash point</td>
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</tr>
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<td>evaporation rate</td>
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<tr>
<td>flammability (solid, gas)</td>
<td>not relevant, (fluid)</td>
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<td>explosive limits</td>
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<td>vapour pressure</td>
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<tr>
<td>density</td>
<td>not determined</td>
</tr>
<tr>
<td>vapour density</td>
<td>this information is not available</td>
</tr>
<tr>
<td>relative density</td>
<td>information on this property is not available</td>
</tr>
<tr>
<td>solubility[ies]</td>
<td>not determined</td>
</tr>
<tr>
<td>partition coefficient</td>
<td></td>
</tr>
<tr>
<td>- n-octanol/water (log KOW)</td>
<td>this information is not available</td>
</tr>
</tbody>
</table>
 SECTION 10: Stability and reactivity

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

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

10.3 possibility of hazardous reactions
   no known hazardous reactions.

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

10.5 incompatible materials
   there is no additional information.

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

SECTION 11: Toxicological information

11.1 information on toxicological effects
   test data are not available for the complete mixture.

   classification procedure
   the method for classification of the mixture is based on ingredients of the mixture [additivity formula].

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

   acute toxicity
   shall not be classified as acutely toxic.

   skin corrosion/irritation
   shall not be classified as corrosive/irritant to skin.

   serious eye damage/eye irritation
   shall not be classified as seriously damaging to the eye or eye irritant.

   respiratory or skin sensitisation
   shall not be classified as a respiratory or skin sensitiser.

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

SECTION 12: Ecological information

12.1 toxicity
shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability
data are not available.

12.3 bioaccumulative potential
data are not available.

12.4 mobility in soil
data are not available.

12.5 results of PBT and vPvB assessment
data are not available.

12.6 other adverse effects
data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods
sewage disposal-relevant information
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings
completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

remarks
please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.
SECTION 14: Transport information

14.1 UN number
not subject to transport regulations

14.2 UN proper shipping name
not relevant

14.3 transport hazard class(es)
none

14.4 packing group
not assigned to a packing group

14.5 environmental hazards
non-environmentally hazardous acc. to the dangerous goods regulations

14.6 special precautions for user
there is no additional information.

14.7 transport in bulk according to Annex II of MARPOL and the IBC Code
the cargo is not intended to be carried in bulk.

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

<table>
<thead>
<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>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]</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route [European Agreement concerning the International Carriage of Dangerous Goods by Road]</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations [see IATA/DGR]</td>
</tr>
<tr>
<td>GHS</td>
<td>“Globally Harmonized System of Classification and Labelling of Chemicals” developed by the United Nations</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport [IATA]</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
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</table>
hmeDNA control

<table>
<thead>
<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships (abbr. of &quot;Marine Pollutant&quot;)</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses [Regulations concerning the International carriage of Dangerous goods by Rail]</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
</tr>
</tbody>
</table>

**key literature references and sources for data**


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

1.1 product identifier
- trade name: meDNA control
- 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 office hours: Mon–Fri 09:00 AM - 05:00 PM

poison centre

<table>
<thead>
<tr>
<th>country</th>
<th>name</th>
<th>telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service</td>
<td>111</td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

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

2.2 label elements
- labelling according to Regulation (EC) No 1272/2008 (CLP)
  - not required

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

SECTION 3: Composition/information on ingredients

3.1 substances
- not relevant (mixture)

3.2 mixtures
- description of the mixture
  - This mixture does not contain any potentially hazardous products.
SECTION 4: First aid measures

4.1 description of first aid measures

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

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

following skin contact
wash with plenty of soap and water.

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

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media
water spray, BC-powder, carbon dioxide (CO2)

unsuitable extinguishing media
water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products
nitrogen oxides (NOx)

5.3 advice for firefighters

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

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel
remove persons to safety.

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

6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.
6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections

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

SECTION 7: Handling and storage

7.1 precautions for safe handling

recommendations

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

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

advice on general occupational hygiene

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

7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as frost

7.3 specific end use(s)

see section 16 for a general overview.

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

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<tr>
<th>property</th>
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<td>colour: colourless</td>
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<td>other safety parameters</td>
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<td>vapour pressure: not determined</td>
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<td>density: not determined</td>
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<td>vapour density: this information is not available</td>
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<td>partition coefficient</td>
<td>- n-octanol/water [log KOW]: this information is not available</td>
</tr>
</tbody>
</table>
SECTION 10: Stability and reactivity

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

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

10.3 possibility of hazardous reactions
no known hazardous reactions.

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

10.5 incompatible materials
there is no additional information.

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

SECTION 11: Toxicological information

11.1 information on toxicological effects
test data are not available for the complete mixture.

classification procedure
the method for classification of the mixture is based on ingredients of the mixture [additivity formula].

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

acute toxicity
shall not be classified as acutely toxic.

skin corrosion/irritation
shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation
shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation
shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity
shall not be classified as germ cell mutagenic.
carcinogenicity
shall not be classified as carcinogenic.

reproductive toxicity
shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure
shall not be classified as a specific target organ toxicant [single exposure].

specific target organ toxicity - repeated exposure
shall not be classified as a specific target organ toxicant [repeated exposure].

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

SECTION 12: Ecological information

12.1 toxicity
shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability
data are not available.

12.3 bioaccumulative potential
data are not available.

12.4 mobility in soil
data are not available.

12.5 results of PBT and vPvB assessment
data are not available.

12.6 other adverse effects
data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods
sewage disposal-relevant information
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings
completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

remarks
please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.
SECTION 14: Transport information

14.1 UN number
not subject to transport regulations

14.2 UN proper shipping name
not relevant

14.3 transport hazard class(es)
none

14.4 packing group
not assigned to a packing group

14.5 environmental hazards
non-environmentally hazardous acc. to the dangerous goods regulations

14.6 special precautions for user
there is no additional information.

14.7 transport in bulk according to Annex II of MARPOL and the IBC Code
the cargo is not intended to be carried in bulk.

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

<table>
<thead>
<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>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]</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route [European Agreement concerning the International Carriage of Dangerous Goods by Road]</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations [see IATA/DGR]</td>
</tr>
<tr>
<td>GHS</td>
<td>“Globally Harmonized System of Classification and Labelling of Chemicals” developed by the United Nations</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport [IATA]</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
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</table>
Safety Data Sheet

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

meDNA control

version number: GHS 1.0

date of compilation: 2020-03-31

<table>
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<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
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<tbody>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships (abbr. of “Marine Pollutant”)</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
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<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses [Regulations concerning the International carriage of Dangerous goods by Rail]</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
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</table>

key literature references and sources for data


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

1.1 product identifier
   trade name unDNA control
   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 office hours: Mon-Fri 09:00 AM - 05:00 PM

<table>
<thead>
<tr>
<th>poison centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>country</td>
</tr>
<tr>
<td>United Kingdom</td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

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

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

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

SECTION 3: Composition/information on ingredients

3.1 substances
   not relevant (mixture)

3.2 mixtures
   description of the mixture
   This mixture does not contain any potentially hazardous products.
SECTION 4: First aid measures

4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NOx)

5.3 advice for firefighters

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

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

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

6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.
6.3 methods and material for containment and cleaning up
advice on how to contain a spill
covering of drains
advice on how to clean up a spill
wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder
appropriate containment techniques
use of adsorbent materials.
other information relating to spills and releases
place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections
hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

SECTION 7: Handling and storage
7.1 precautions for safe handling
recommendations
- measures to prevent fire as well as aerosol and dust generation
  use local and general ventilation. use only in well-ventilated areas.
advice on general occupational hygiene
  wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

7.2 conditions for safe storage, including any incompatibilities
control of effects
protect against external exposure, such as frost

7.3 specific end use(s)
see section 16 for a general overview.

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

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<th>appearance</th>
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<td>physical state</td>
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**other safety parameters**

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<td>- n-octanol/water (log KOW)</td>
<td>this information is not available</td>
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</table>
### SECTION 10: Stability and reactivity

#### 10.1 reactivity
Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

#### 10.2 chemical stability
The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 possibility of hazardous reactions
No known hazardous reactions.

#### 10.4 conditions to avoid
There are no specific conditions known which have to be avoided.

#### 10.5 incompatible materials
There is no additional information.

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

### SECTION 11: Toxicological information

#### 11.1 information on toxicological effects
Test data are not available for the complete mixture.

**classification procedure**
The method for classification of the mixture is based on ingredients of the mixture [additivity formula].

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

**acute toxicity**
Shall not be classified as acutely toxic.

**skin corrosion/irritation**
Shall not be classified as corrosive/irritant to skin.

**serious eye damage/eye irritation**
Shall not be classified as seriously damaging to the eye or eye irritant.

**respiratory or skin sensitisation**
Shall not be classified as a respiratory or skin sensitiser.

**germ cell mutagenicity**
Shall not be classified as germ cell mutagenic.
carcinogenicity
shall not be classified as carcinogenic.

reproductive toxicity
shall not be classified as a reproductive toxicant.

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

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

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

SECTION 12: Ecological information

12.1 toxicity
shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability
data are not available.

12.3 bioaccumulative potential
data are not available.

12.4 mobility in soil
data are not available.

12.5 results of PBT and vPvB assessment
data are not available.

12.6 other adverse effects
data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods
sewage disposal-relevant information
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings
completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

remarks
please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.
SECTION 14: Transport information

14.1 UN number  
not subject to transport regulations

14.2 UN proper shipping name  
not relevant

14.3 transport hazard class(es)  
one

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

<table>
<thead>
<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
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<tbody>
<tr>
<td>ADN</td>
<td>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]</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route [European Agreement concerning the International Carriage of Dangerous Goods by Road]</td>
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<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations [see IATA/DGR]</td>
</tr>
<tr>
<td>GHS</td>
<td>“Globally Harmonized System of Classification and Labelling of Chemicals” developed by the United Nations</td>
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<td>IATA</td>
<td>International Air Transport Association</td>
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<td>Dangerous Goods Regulations (DGR) for the air transport [IATA]</td>
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**unDNA control**

<table>
<thead>
<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
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<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships (abbr. of &quot;Marine Pollutant&quot;)</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses [Regulations concerning the International carriage of Dangerous goods by Rail]</td>
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<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
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</table>

**key literature references and sources for data**


**classification procedure**

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

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

**disclaimer**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.
5-hmC monoclonal antibody (mouse)

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

1.1 product identifier
trade name: 5-hmC monoclonal antibody (mouse)
registration number (REACH): not relevant (mixture)
product code(s): C15200200

1.2 relevant identified uses of the substance or mixture and uses advised against
relevant identified uses: for research use only, not for use in diagnostic or therapeutic procedures.

1.3 details of the supplier of the safety data sheet
Diagenode SA
LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3
4102 Seraing
Belgium
telephone: +32 4 364 20 50
e-mail: info@diagenode.com

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

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<thead>
<tr>
<th>poison centre</th>
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</thead>
<tbody>
<tr>
<td>country</td>
</tr>
<tr>
<td>United Kingdom</td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

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

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

2.3 other hazards
results of PBT and vPvB assessment
this mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SECTION 3: Composition/information on ingredients

3.1 substances
not relevant (mixture)

3.2 mixtures
description of the mixture
This product is composed of antibodies in aqueous buffer solution. It contains 0.05% sodium azide as preservative.

SECTION 4: First aid measures

4.1 description of first aid measures

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

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

following skin contact
wash with plenty of soap and water.

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

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

4.2 most important symptoms and effects, both acute and delayed
symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed
none

SECTION 5: Firefighting measures

5.1 extinguishing media
suitable extinguishing media
water spray, BC-powder, carbon dioxide (CO2)

unsuitable extinguishing media
water jet

5.2 special hazards arising from the substance or mixture
hazardous combustion products
nitrogen oxides (NOx)

5.3 advice for firefighters
in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.
SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures
for non-emergency personnel
remove persons to safety.
for emergency responders
wear breathing apparatus if exposed to vapours/dust/spray/gases.

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

6.3 methods and material for containment and cleaning up
advice on how to contain a spill
covering of drains
advice on how to clean up a spill
wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder
appropriate containment techniques
use of adsorbent materials.
other information relating to spills and releases
place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections
hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 precautions for safe handling
recommendations
- measures to prevent fire as well as aerosol and dust generation
use local and general ventilation. use only in well-ventilated areas.
advice on general occupational hygiene
wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

7.2 conditions for safe storage, including any incompatibilities
control of effects
protect against external exposure, such as frost

7.3 specific end use(s)
see section 16 for a general overview.
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/imperviousness 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

<table>
<thead>
<tr>
<th>physical state</th>
<th>liquid</th>
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<td>colourless</td>
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<td>odour</td>
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</table>

other safety parameters

<table>
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<th>parameter</th>
<th>value</th>
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<tr>
<td>pH (value)</td>
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<tr>
<td>melting point/freezing point</td>
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<td>initial boiling point and boiling range</td>
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<tr>
<td>flash point</td>
<td>not determined</td>
</tr>
<tr>
<td>evaporation rate</td>
<td>not determined</td>
</tr>
<tr>
<td>flammability (solid, gas)</td>
<td>not relevant, (fluid)</td>
</tr>
<tr>
<td>explosive limits</td>
<td>not determined</td>
</tr>
</tbody>
</table>
5-hmC monoclonal antibody (mouse)

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.
5-hmC monoclonal antibody (mouse)

SECTION 12: Ecological information

12.1 toxicity
shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability
data are not available.

12.3 bioaccumulative potential
data are not available.

12.4 mobility in soil
data are not available.

12.5 results of PBT and vPvB assessment
data are not available.

12.6 other adverse effects
data are not available.
**SECTION 13: Disposal considerations**

13.1 waste treatment methods

- sewage disposal-relevant information
  
  do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

- waste treatment of containers/packagings
  
  completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

**remarks**

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

**SECTION 14: Transport information**

14.1 UN number

- not subject to transport regulations

14.2 UN proper shipping name

- not relevant

14.3 transport hazard class(es)

- none

14.4 packing group

- not assigned to a packing group

14.5 environmental hazards

- non-environmentally hazardous acc. to the dangerous goods regulations

14.6 special precautions for user

- there is no additional information.

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

- the cargo is not intended to be carried in bulk.

**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

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

key literature references and sources for data


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

1.1 product identifier

   trade name: Mouse IgG
   registration number (REACH): not relevant (mixture)
   product code(s): C15400001

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

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

1.3 details of the supplier of the safety data sheet

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

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

1.4 emergency telephone number

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

<table>
<thead>
<tr>
<th>country</th>
<th>name</th>
<th>telephone</th>
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<tbody>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service</td>
<td>111</td>
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</table>

SECTION 2: Hazards identification

2.1 classification of the substance or mixture

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

2.2 label elements

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

2.3 other hazards

   results of PBT and vPvB assessment
   this mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SECTION 3: Composition/information on ingredients

3.1 substances
not relevant (mixture)

3.2 mixtures
description of the mixture
This product is composed of antibodies in aqueous buffer solution. It contains 0.05% sodium azide as preservative.

SECTION 4: First aid measures

4.1 description of first aid measures

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

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

following skin contact
wash with plenty of soap and water.

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

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

4.2 most important symptoms and effects, both acute and delayed
symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed
none

SECTION 5: Firefighting measures

5.1 extinguishing media
suitable extinguishing media
water spray, BC-powder, carbon dioxide (CO2)

unsuitable extinguishing media
water jet

5.2 special hazards arising from the substance or mixture
hazardous combustion products
nitrogen oxides (NOx)

5.3 advice for firefighters
in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not allow firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with normal precautions from a reasonable distance.
SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures
- for non-emergency personnel
  remove persons to safety.
- for emergency responders
  wear breathing apparatus if exposed to vapours/dust/spray/gases.

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

6.3 methods and material for containment and cleaning up
- advice on how to contain a spill
  covering of drains
- advice on how to clean up a spill
  wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder
- appropriate containment techniques
  use of adsorbent materials.
- other information relating to spills and releases
  place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections
- hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 precautions for safe handling
- recommendations
  - measures to prevent fire as well as aerosol and dust generation
    use local and general ventilation. use only in well-ventilated areas.
- advice on general occupational hygiene
  wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

7.2 conditions for safe storage, including any incompatibilities
- control of effects
  protect against external exposure, such as frost

7.3 specific end use(s)
- see section 16 for a general overview.
SECTION 8: Exposure controls/personal protection

8.1 control parameters

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<th>country</th>
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<th>CAS No</th>
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<th>STEL [ppm]</th>
<th>STEL [mg/m³]</th>
<th>Ceiling-C [ppm]</th>
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notations:
- Ceiling-C: ceiling value is a limit value above which exposure should not occur
- STEL: 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

appearance

<table>
<thead>
<tr>
<th>physical state</th>
<th>liquid</th>
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other safety parameters

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<td>oxidising properties</td>
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9.2 other information
there is no additional information

SECTION 10: Stability and reactivity

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

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

10.3 possibility of hazardous reactions
no known hazardous reactions.

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

10.5 incompatible materials
there is no additional information.
10.6 **hazardous decomposition products**
reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

**SECTION 11: Toxicological information**

11.1 **information on toxicological effects**
test data are not available for the complete mixture.

**classification procedure**
the method for classification of the mixture is based on ingredients of the mixture [additivity formula].

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

**acute toxicity**
shall not be classified as acutely toxic.

**skin corrosion/irritation**
shall not be classified as corrosive/irritant to skin.

**serious eye damage/eye irritation**
shall not be classified as seriously damaging to the eye or eye irritant.

**respiratory or skin sensitisation**
shall not be classified as a respiratory or skin sensitiser.

**germ cell mutagenicity**
shall not be classified as germ cell mutagenic.

**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.

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**

<table>
<thead>
<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>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)</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the international carriage of dangerous goods by road)</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)</td>
</tr>
<tr>
<td>Ceiling-C</td>
<td>Ceiling value</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations (see IATA/DGR)</td>
</tr>
<tr>
<td>GHS</td>
<td>“Globally Harmonized System of Classification and Labelling of Chemicals” developed by the United Nations</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport (IATA)</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships [abbr. of “Marine Pollutant”]</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>ppm</td>
<td>Parts per million</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport international ferroviaire des marchandises dangereuses (Regulations concerning the international carriage of dangerous goods by rail)</td>
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<tr>
<td>STEL</td>
<td>Short-term exposure limit</td>
</tr>
<tr>
<td>TWA</td>
<td>Time-weighted average</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
</tr>
<tr>
<td>WEL</td>
<td>Workplace exposure limit</td>
</tr>
</tbody>
</table>

**key literature references and sources for data**


**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.
section 1: identification of the substance/mixture and of the company/undertaking

1.1 product identifier

trade name: DiaMag anti-mouse IgG coated magnetic beads
registration number (REACH): not relevant (mixture)
product code(s): C03010022

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
LIÈGE SCIENCE PARK Rue du Bois Saint-Jean, 3
4102 Seraing
Belgium

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

1.4 emergency telephone number

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

<table>
<thead>
<tr>
<th>country</th>
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<tbody>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service</td>
<td>111</td>
</tr>
</tbody>
</table>

section 2: hazards identification

2.1 classification of the substance or mixture

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

2.2 label elements

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

2.3 other hazards

results of PBT and vPvB assessment
this mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SECTION 3: Composition/information on ingredients

3.1 substances
not relevant (mixture)

3.2 mixtures
description of the mixture
This mixture does not contain any potentially hazardous products.

SECTION 4: First aid measures

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

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

following skin contact
wash with plenty of soap and water.

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

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

4.2 most important symptoms and effects, both acute and delayed
symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed
none

SECTION 5: Firefighting measures

5.1 extinguishing media
suitable extinguishing media
water spray, BC-powder, carbon dioxide (CO2)

unsuitable extinguishing media
water jet

5.2 special hazards arising from the substance or mixture
hazardous combustion products
nitrogen oxides (NOx)

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
coverage 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.
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

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<th>physical state</th>
<th>liquid (suspension)</th>
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other safety parameters

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<td>flash point</td>
<td>not determined</td>
</tr>
<tr>
<td>evaporation rate</td>
<td>not determined</td>
</tr>
<tr>
<td>flammability (solid, gas)</td>
<td>not relevant, (fluid)</td>
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<tr>
<td>explosive limits</td>
<td>not determined</td>
</tr>
</tbody>
</table>
**DiaMag anti-mouse IgG coated magnetic beads**

**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.
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

DiaMag anti-mouse IgG coated magnetic beads

version number: GHS 1.0 date of compilation: 2020-03-31

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.
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.
Safety Data Sheet
according to Regulation [EC] No. 1907/2006 (REACH)

DiaMag anti-mouse IgG coated magnetic beads

version number: GHS 1.0
date of compilation: 2020-03-31

SECTION 16: Other information

abbreviations and acronyms

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

key literature references and sources for data


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

1.1 **product identifier**
- **trade name**: hMeDIP buffer H2
- **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 office hours: Mon-Fri 09:00 AM - 05:00 PM

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<td>National Poisons Information Service</td>
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</tr>
</tbody>
</table>

**SECTION 2: Hazards identification**

2.1 **classification of the substance or mixture**
- **classification according to Regulation (EC) No 1272/2008 (CLP)**: this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

2.2 **label elements**
- **labelling according to Regulation (EC) No 1272/2008 (CLP)**: not required

2.3 **other hazards**
- **results of PBT and vPvB assessment**: this mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

3.1 **substances**
- not relevant (mixture)

3.2 **mixtures**
- **description of the mixture**: This mixture does not contain any potentially hazardous products.
**SECTION 4: First aid measures**

**4.1 description of first aid measures**

**general notes**

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

**following inhalation**

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

**following skin contact**

- wash with plenty of soap and water.

**following eye contact**

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

**following ingestion**

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

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

symptoms and effects are not known to date.

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

none

**SECTION 5: Firefighting measures**

**5.1 extinguishing media**

- suitable extinguishing media
  - water spray, BC-powder, carbon dioxide (CO2)
- unsuitable extinguishing media
  - water jet

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

**5.3 advice for firefighters**

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

**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.

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

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other safety parameters

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partition coefficient

| - n-octanol/water (log KOW) | this information is not available |
hMeDIP buffer H2

SECTION 10: Stability and reactivity

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

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

10.3 possibility of hazardous reactions
no known hazardous reactions.

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

10.5 incompatible materials
there is no additional information.

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

SECTION 11: Toxicological information

11.1 information on toxicological effects
test data are not available for the complete mixture.

classification procedure
the method for classification of the mixture is based on ingredients of the mixture [additivity formula].

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

acute toxicity
shall not be classified as acutely toxic.

skin corrosion/irritation
shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation
shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation
shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity
shall not be classified as germ cell mutagenic.
carcinogenicity
shall not be classified as carcinogenic.

reproductive toxicity
shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure
shall not be classified as a specific target organ toxicant [single exposure].

specific target organ toxicity - repeated exposure
shall not be classified as a specific target organ toxicant [repeated exposure].

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

SECTION 12: Ecological information

12.1 toxicity
shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability
data are not available.

12.3 bioaccumulative potential
data are not available.

12.4 mobility in soil
data are not available.

12.5 results of PBT and vPvB assessment
data are not available.

12.6 other adverse effects
data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods
sewage disposal-relevant information
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings
completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

remarks
please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.
SECTION 14: Transport information

14.1 UN number
not subject to transport regulations

14.2 UN proper shipping name
not relevant

14.3 transport hazard class(es)
none

14.4 packing group
not assigned to a packing group

14.5 environmental hazards
non-environmentally hazardous acc. to the dangerous goods regulations

14.6 special precautions for user
there is no additional information.

14.7 transport in bulk according to Annex II of MARPOL and the IBC Code
the cargo is not intended to be carried in bulk.

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

<table>
<thead>
<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>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]</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route [European Agreement concerning the International Carriage of Dangerous Goods by Road]</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations [see IATA/DGR]</td>
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<td>GHS</td>
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hMeDIP buffer H2

key literature references and sources for data

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

1.1 product identifier
   trade name                                  hMeDIP buffer H3
   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 office hours: Mon-Fri 09:00 AM - 05:00 PM

<table>
<thead>
<tr>
<th>poison centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>country</td>
</tr>
<tr>
<td>United Kingdom</td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

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

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

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

SECTION 3: Composition/information on ingredients

3.1 substances
   not relevant (mixture)

3.2 mixtures
   description of the mixture
   This mixture does not contain any potentially hazardous products.
SECTION 4: First aid measures

4.1 description of first aid measures

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

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

  - **following skin contact**
    - wash with plenty of soap and water.

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

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

- **suitable extinguishing media**
  - water spray, BC-powder, carbon dioxide (CO2)

- **unsuitable extinguishing media**
  - water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

- **nitrogen oxides (NOx)**

5.3 advice for firefighters

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

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

- remove persons to safety.

for emergency responders

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

6.2 environmental precautions

- keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.
6.3 methods and material for containment and cleaning up

advice on how to contain a spill
covering of drains
advice on how to clean up a spill
   wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder
appropriate containment techniques
   use of adsorbent materials.
other information relating to spills and releases
   place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections

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

SECTION 7: Handling and storage

7.1 precautions for safe handling

recommendations
   - measures to prevent fire as well as aerosol and dust generation
     use local and general ventilation. use only in well-ventilated areas.
advice on general occupational hygiene
   wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

7.2 conditions for safe storage, including any incompatibilities

control of effects
   protect against external exposure, such as frost

7.3 specific end use(s)

   see section 16 for a general overview.

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

<table>
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<tr>
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<td>physical state</td>
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<td>odourless</td>
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<td>initial boiling point and boiling range</td>
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<td>flash point</td>
<td>not determined</td>
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<td>evaporation rate</td>
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<td>flammability (solid, gas)</td>
<td>not relevant, (fluid)</td>
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<td>explosive limits</td>
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<td>vapour pressure</td>
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<tr>
<td>density</td>
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<tr>
<td>partition coefficient</td>
<td></td>
</tr>
<tr>
<td>- n-octanol/water (log KOW)</td>
<td>this information is not available</td>
</tr>
</tbody>
</table>
### 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 sensitisier.

**Germ cell mutagenicity**
Shall not be classified as germ cell mutagenic.
carcinogenicity
shall not be classified as carcinogenic.

reproductive toxicity
shall not be classified as a reproductive toxicant.

specific target organ toxicity - single exposure
shall not be classified as a specific target organ toxicant [single exposure].

specific target organ toxicity - repeated exposure
shall not be classified as a specific target organ toxicant [repeated exposure].

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

SECTION 12: Ecological information

12.1 toxicity
shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability
data are not available.

12.3 bioaccumulative potential
data are not available.

12.4 mobility in soil
data are not available.

12.5 results of PBT and vPvB assessment
data are not available.

12.6 other adverse effects
data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods
sewage disposal-relevant information
   do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

   waste treatment of containers/packagings
   completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

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

<table>
<thead>
<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>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]</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route [European Agreement concerning the International Carriage of Dangerous Goods by Road]</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations [see IATA/DGR]</td>
</tr>
<tr>
<td>GHS</td>
<td>“Globally Harmonized System of Classification and Labelling of Chemicals” developed by the United Nations</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport [IATA]</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
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hMeDIP buffer H3

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<thead>
<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
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<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships [abbr. of &quot;Marine Pollutant&quot;]</td>
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<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses [Regulations concerning the International carriage of Dangerous goods by Rail]</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
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</table>

key literature references and sources for data


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

1.1 product identifier
   trade name
   DNA Isolation Buffer (DIB)
   registration number (REACH)
   not relevant (mixture)

1.2 relevant identified uses of the substance or mixture and uses advised against
   relevant identified uses
   for research use only, not for use in diagnostic or therapeutic procedures.

1.3 details of the supplier of the safety data sheet
   Diagenode SA
   LIEGE SCIENCE PARK Rue du Bois Saint-Jean, 3
   4102 Seraing
   Belgium
   telephone: +32 4 364 20 50
   e-mail: info@diagenode.com

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

<table>
<thead>
<tr>
<th>poison centre</th>
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<tr>
<td></td>
<td>United Kingdom</td>
<td>National Poisons Information Service</td>
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</table>

SECTION 2: Hazards identification

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

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

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

SECTION 3: Composition/information on ingredients

3.1 substances
   not relevant (mixture)

3.2 mixtures
   description of the mixture
   This mixture does not contain any potentially hazardous products.
SECTION 4: First aid measures

4.1 description of first aid measures

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

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

following skin contact
wash with plenty of soap and water.

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

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

4.2 most important symptoms and effects, both acute and delayed
symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed
none

SECTION 5: Firefighting measures

5.1 extinguishing media
suitable extinguishing media
water spray, BC-powder, carbon dioxide (CO2)

unsuitable extinguishing media
water jet

5.2 special hazards arising from the substance or mixture
hazardous combustion products
nitrogen oxides (NOx)

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

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures
for non-emergency personnel
remove persons to safety.

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

6.2 environmental precautions
keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.
6.3 methods and material for containment and cleaning up
advice on how to contain a spill
covering of drains
advice on how to clean up a spill
wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder
appropriate containment techniques
use of adsorbent materials.
other information relating to spills and releases
place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections
hazardous combustion products: see section 5. personal protective equipment: see section 8. incompatible materials: see section 10. disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 precautions for safe handling
recommendations
- measures to prevent fire as well as aerosol and dust generation
  use local and general ventilation. use only in well-ventilated areas.

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

7.2 conditions for safe storage, including any incompatibilities
control of effects
protect against external exposure, such as frost

7.3 specific end use(s)
see section 16 for a general overview.

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

<table>
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other safety parameters

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<tr>
<td>partition coefficient</td>
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<tr>
<td>- n-octanol/water (log KOW)</td>
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auto-ignition temperature: not determined
viscosity: not determined
explosive properties: none
oxidising properties: none

SECTION 10: Stability and reactivity

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

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

10.3 possibility of hazardous reactions
no known hazardous reactions.

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

10.5 incompatible materials
there is no additional information.

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

SECTION 11: Toxicological information

11.1 information on toxicological effects
test data are not available for the complete mixture.

classification procedure
the method for classification of the mixture is based on ingredients of the mixture [additivity formula].

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

acute toxicity
shall not be classified as acutely toxic.

skin corrosion/irritation
shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation
shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation
shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity
shall not be classified as germ cell mutagenic.
carcinogenicity
shall not be classified as carcinogenic.

reproductive toxicity
shall not be classified as a reproductive toxicant.

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

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

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

SECTION 12: Ecological information

12.1 toxicity
shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability
data are not available.

12.3 bioaccumulative potential
data are not available.

12.4 mobility in soil
data are not available.

12.5 results of PBT and vPvB assessment
data are not available.

12.6 other adverse effects
data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods
sewage disposal-relevant information
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings
completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

remarks
please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.
SECTION 14: Transport information

14.1 UN number
not subject to transport regulations

14.2 UN proper shipping name
not relevant

14.3 transport hazard class(es)
none

14.4 packing group
not assigned to a packing group

14.5 environmental hazards
non-environmentally hazardous acc. to the dangerous goods regulations

14.6 special precautions for user
there is no additional information.

14.7 transport in bulk according to Annex II of MARPOL and the IBC Code
the cargo is not intended to be carried in bulk.

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

<table>
<thead>
<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
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</thead>
<tbody>
<tr>
<td>ADN</td>
<td>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]</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route [European Agreement concerning the International Carriage of Dangerous Goods by Road]</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations [see IATA/DGR]</td>
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<tr>
<td>GHS</td>
<td>“Globally Harmonized System of Classification and Labelling of Chemicals” developed by the United Nations</td>
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<td>ICAO</td>
<td>International Civil Aviation Organization</td>
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<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
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</tbody>
</table>
DNA Isolation Buffer (DIB)

<table>
<thead>
<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships [abbr. of &quot;Marine Pollutant&quot;]</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses [Regulations concerning the International carriage of Dangerous goods by Rail]</td>
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<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
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</table>

**key literature references and sources for data**


**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.
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 office hours: Mon–Fri 09:00 AM - 05:00 PM

  poison centre

<table>
<thead>
<tr>
<th>country</th>
<th>name</th>
<th>telephone</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service</td>
<td>111</td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

2.1 classification of the substance or mixture

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

<table>
<thead>
<tr>
<th>section</th>
<th>hazard class</th>
<th>category</th>
<th>hazard class and category</th>
<th>hazard statement</th>
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<tbody>
<tr>
<td>3.4R</td>
<td>respiratory sensitisation</td>
<td>1</td>
<td>Resp. Sens. 1</td>
<td>H334</td>
</tr>
</tbody>
</table>

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.
- 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

<table>
<thead>
<tr>
<th>name of substance</th>
<th>identifier</th>
<th>wt%</th>
<th>classification acc. to GHS</th>
<th>pictograms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proteinase, tritirachium album serine</td>
<td>CAS No 39450-01-6</td>
<td>2</td>
<td>Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Resp. Sens. 1A / H334</td>
<td>![ pictogram ]</td>
</tr>
</tbody>
</table>

for full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none
SECTION 5: Firefighting measures

5.1 extinguishing media
   suitable extinguishing media
      water spray, BC-powder, carbon dioxide (CO2)
   unsuitable extinguishing media
      water jet

5.2 special hazards arising from the substance or mixture

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

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

<table>
<thead>
<tr>
<th>physical state</th>
<th>liquid</th>
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<tr>
<td>colour</td>
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<td>odour</td>
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**other safety parameters**

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<tr>
<td>pH (value)</td>
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<td>initial boiling point and boiling range</td>
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<td>flash point</td>
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</tr>
<tr>
<td>evaporation rate</td>
<td>not determined</td>
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<td>flammability (solid, gas)</td>
<td>not relevant, (fluid)</td>
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<td>explosive limits</td>
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<td>vapour pressure</td>
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<tr>
<td>density</td>
<td>not determined</td>
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<td>vapour density</td>
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<td>auto-ignition temperature</td>
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<tr>
<td>viscosity</td>
<td>not determined</td>
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<tr>
<td>explosive properties</td>
<td>none</td>
</tr>
<tr>
<td>oxidising properties</td>
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</tr>
</tbody>
</table>

9.2 **other information**

<table>
<thead>
<tr>
<th>Information</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>there is no additional information</td>
<td></td>
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</tbody>
</table>

**SECTION 10: Stability and reactivity**

10.1 **reactivity**

Concerning incompatibility: see below “Conditions to avoid” and “Incompatible materials”.

10.2 **chemical stability**

See below “Conditions to avoid”.

10.3 **possibility of hazardous reactions**

No known hazardous reactions.

10.4 **conditions to avoid**

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

10.5 **incompatible materials**

There is no additional information.
10.6 hazardous decomposition products
reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 information on toxicological effects
test data are not available for the complete mixture.

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

classification according to GHS (1272/2008/EC, CLP)
acute toxicity
shall not be classified as acutely toxic.

skin corrosion/irritation
shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation
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.

germin cell mutagenicity
shall not be classified as germ cell mutagenic.

carcinogenicity
shall not be classified as carcinogenic.

reproductive toxicity
shall not be classified as a reproductive toxicant.

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

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

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

SECTION 12: Ecological information

12.1 toxicity
shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability
data are not available.

12.3 bioaccumulative potential
data are not available.

12.4 mobility in soil
data are not available.
12.5 results of PBT and vPvB assessment
Data are not available.

12.6 other adverse effects
Data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods
Sewage disposal-relevant information:
Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings:
Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

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

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

<table>
<thead>
<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>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]</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route [European Agreement concerning the International Carriage of Dangerous Goods by Road]</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service [service that maintains the most comprehensive list of chemical substances]</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations [see IATA/DGR]</td>
</tr>
<tr>
<td>EC No</td>
<td>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]</td>
</tr>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>ELINCS</td>
<td>European List of Notified Chemical Substances</td>
</tr>
<tr>
<td>Eye Dam.</td>
<td>Seriously damaging to the eye</td>
</tr>
<tr>
<td>Eye Irrit.</td>
<td>Irritant to the eye</td>
</tr>
<tr>
<td>GHS</td>
<td>“Globally Harmonized System of Classification and Labelling of Chemicals” developed by the United Nations</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport [IATA]</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
<tr>
<td>index No</td>
<td>The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships [abbr. of “Marine Pollutant”]</td>
</tr>
<tr>
<td>NLP</td>
<td>No-Longer Polymer</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>Resp. Sens.</td>
<td>Respiratory sensitisation</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses [Regulations concerning the International carriage of Dangerous goods by Rail]</td>
</tr>
<tr>
<td>Skin Corr.</td>
<td>Corrosive to skin</td>
</tr>
<tr>
<td>Skin Irrit.</td>
<td>Irritant to skin</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
</tr>
</tbody>
</table>

key literature references and sources for data
proteinase K


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)

<table>
<thead>
<tr>
<th>code</th>
<th>text</th>
</tr>
</thead>
<tbody>
<tr>
<td>H315</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>H334</td>
<td>May cause allergy or asthma symptoms or breathing difficulties if inhaled.</td>
</tr>
</tbody>
</table>

disclaimer
	his information is based upon the present state of our knowledge. this SDS has been compiled and is solely intended for this product.
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 product identifier
trade name
hmeDNA primer pair
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 office hours: Mon-Fri 09:00 AM - 05:00 PM

poison centre

<table>
<thead>
<tr>
<th>country</th>
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</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service</td>
<td>111</td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

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

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

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

SECTION 3: Composition/information on ingredients

3.1 substances
not relevant (mixture)

3.2 mixtures
description of the mixture
This mixture does not contain any potentially hazardous products.
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 ad-
vice. in case of unconsciousness place person in the recovery position. Never give anything by mouth.

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NOx)

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 al-
low firefighting water to enter drains or water courses. collect contaminated firefighting water separately. fight fire with
normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

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

6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.
6.3 methods and material for containment and cleaning up

advice on how to contain a spill

covering of drains

advice on how to clean up a spill

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

appropriate containment techniques

use of adsorbent materials.

other information relating to spills and releases

place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections

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

SECTION 7: Handling and storage

7.1 precautions for safe handling

recommendations

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

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

advice on general occupational hygiene

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

7.2 conditions for safe storage, including any incompatibilities

control of effects

protect against external exposure, such as frost

7.3 specific end use(s)

see section 16 for a general overview.

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

<table>
<thead>
<tr>
<th>appearance</th>
<th></th>
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<tbody>
<tr>
<td>physical state</td>
<td>liquid</td>
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<td>colour</td>
<td>colourless</td>
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<tr>
<td>odour</td>
<td>odourless</td>
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</table>

<table>
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<tr>
<th>other safety parameters</th>
<th></th>
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<tr>
<td>pH (value)</td>
<td>not determined</td>
</tr>
<tr>
<td>melting point/freezing point</td>
<td>not determined</td>
</tr>
<tr>
<td>initial boiling point and boiling range</td>
<td>not determined</td>
</tr>
<tr>
<td>flash point</td>
<td>not determined</td>
</tr>
<tr>
<td>evaporation rate</td>
<td>not determined</td>
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<td>flammability (solid, gas)</td>
<td>not relevant, (fluid)</td>
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<td>explosive limits</td>
<td>not determined</td>
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<tr>
<td>vapour pressure</td>
<td>not determined</td>
</tr>
<tr>
<td>density</td>
<td>not determined</td>
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<tr>
<td>vapour density</td>
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<tr>
<td>relative density</td>
<td>information on this property is not available</td>
</tr>
<tr>
<td>solubility[ies]</td>
<td>not determined</td>
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<tr>
<td>partition coefficient</td>
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<tr>
<td>- n-octanol/water (log KOW)</td>
<td>this information is not available</td>
</tr>
</tbody>
</table>
SECTION 10: Stability and reactivity

10.1 reactivity

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

10.2 chemical stability

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

10.3 possibility of hazardous reactions

no known hazardous reactions.

10.4 conditions to avoid

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

10.5 incompatible materials

there is no additional information.

10.6 hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 information on toxicological effects

test data are not available for the complete mixture.

classification procedure

the method for classification of the mixture is based on ingredients of the mixture [additivity formula].

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

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

acute toxicity

shall not be classified as acutely toxic.

skin corrosion/irritation

shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation

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

respiratory or skin sensitisation

shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity

shall not be classified as germ cell mutagenic.
**carcinogenicity**
shall not be classified as carcinogenic.

**reproductive toxicity**
shall not be classified as a reproductive toxicant.

**specific target organ toxicity - single exposure**
shall not be classified as a specific target organ toxicant [single exposure].

**specific target organ toxicity - repeated exposure**
shall not be classified as a specific target organ toxicant [repeated exposure].

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

---

### SECTION 12: Ecological information

**12.1 toxicity**
shall not be classified as hazardous to the aquatic environment.

**12.2 persistence and degradability**
data are not available.

**12.3 bioaccumulative potential**
data are not available.

**12.4 mobility in soil**
data are not available.

**12.5 results of PBT and vPvB assessment**
data are not available.

**12.6 other adverse effects**
data are not available.

---

### SECTION 13: Disposal considerations

**13.1 waste treatment methods**
sewage disposal-relevant information

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

waste treatment of containers/packagings

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

**remarks**
please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.
SECTION 14: Transport information

14.1 UN number
not subject to transport regulations

14.2 UN proper shipping name
not relevant

14.3 transport hazard class(es)
none

14.4 packing group
not assigned to a packing group

14.5 environmental hazards
non-environmentally hazardous acc. to the dangerous goods regulations

14.6 special precautions for user
there is no additional information.

14.7 transport in bulk according to Annex II of MARPOL and the IBC Code
the cargo is not intended to be carried in bulk.

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

<table>
<thead>
<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
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<tr>
<td>ADN</td>
<td>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]</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route [European Agreement concerning the International Carriage of Dangerous Goods by Road]</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
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<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations (see IATA/DGR)</td>
</tr>
<tr>
<td>GHS</td>
<td>“Globally Harmonized System of Classification and Labelling of Chemicals” developed by the United Nations</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
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<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport (IATA)</td>
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<td>IMDG</td>
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hmeDNA primer pair

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<th>abbr.</th>
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<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships (abbr. of &quot;Marine Pollutant&quot;)</td>
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<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
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<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
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<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses [Regulations concerning the International carriage of Dangerous goods by Rail]</td>
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<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
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</table>

**Key literature references and sources for data**


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

1.1 product identifier
   - trade name: meDNA primer pair
   - 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 office hours: Mon-Fri 09:00 AM - 05:00 PM

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SECTION 2: Hazards identification

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

2.2 label elements
   - labelling according to Regulation (EC) No 1272/2008 (CLP)
     not required

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

SECTION 3: Composition/information on ingredients

3.1 substances
   - not relevant (mixture)

3.2 mixtures
   - description of the mixture
     This mixture does not contain any potentially hazardous products.
SECTION 4: First aid measures

4.1 description of first aid measures

- **general notes**
  - Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

- **following inhalation**
  - If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

- **following skin contact**
  - Wash with plenty of soap and water.

- **following eye contact**
  - Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

- **following ingestion**
  - Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 most important symptoms and effects, both acute and delayed

- Symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

- None

SECTION 5: Firefighting measures

5.1 extinguishing media

- **suitable extinguishing media**
  - Water spray, BC-powder, carbon dioxide (CO2)

- **unsuitable extinguishing media**
  - Water jet

5.2 special hazards arising from the substance or mixture

- **hazardous combustion products**
  - Nitrogen oxides (NOx)

5.3 advice for firefighters

- In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

- **for non-emergency personnel**
  - Remove persons to safety.

- **for emergency responders**
  - Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 environmental precautions

- Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.
6.3 methods and material for containment and cleaning up

advice on how to contain a spill
covering of drains

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

appropriate containment techniques
use of adsorbent materials.

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

6.4 reference to other sections

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

SECTION 7: Handling and storage

7.1 precautions for safe handling

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

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

7.2 conditions for safe storage, including any incompatibilities

control of effects
protect against external exposure, such as frost

7.3 specific end use(s)

see section 16 for a general overview.

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

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other safety parameters

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<td>oxidising properties</td>
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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.

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.

12.5 results of PBT and vPvB assessment
data are not available.

12.6 other adverse effects
data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods
sewage disposal–relevant information
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings
completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

remarks
please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.
### SECTION 14: Transport information

14.1 UN number  
not subject to transport regulations

14.2 UN proper shipping name  
not relevant

14.3 transport hazard class(es)  
none

14.4 packing group  
not assigned to a packing group

14.5 environmental hazards  
non-environmentally hazardous acc. to the dangerous goods regulations

14.6 special precautions for user  
there is no additional information.

14.7 transport in bulk according to Annex II of MARPOL and the IBC Code  
the cargo is not intended to be carried in bulk.

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

**transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**  
not subject to ADR, RID and ADN.

**International Maritime Dangerous Goods Code (IMDG)**  
not subject to IMDG.

**International Civil Aviation Organization (ICAO-IATA/DGR)**  
not subject to ICAO-IATA.

### 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**

<table>
<thead>
<tr>
<th>abbr.</th>
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</tr>
</thead>
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<tr>
<td>ADN</td>
<td>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]</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations [see IATA/DGR]</td>
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<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
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</table>
## meDNA primer pair

### key literature references and sources for data


### 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.

### descriptions of used abbreviations

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<th>abbr.</th>
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</thead>
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<td>MARPOL</td>
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<tr>
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<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
</tr>
</tbody>
</table>
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 **product identifier**
- **trade name**: unDNA primer pair
- **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 office hours: Mon-Fri 09:00 AM - 05:00 PM

<table>
<thead>
<tr>
<th>poison centre</th>
<th>country</th>
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<td></td>
<td>United Kingdom</td>
<td>National Poisons Information Service</td>
<td>111</td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

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

2.2 **label elements**
- labelling according to Regulation (EC) No 1272/2008 (CLP)
  - not required

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

SECTION 3: Composition/information on ingredients

3.1 **substances**
- not relevant (mixture)

3.2 **mixtures**
- **description of the mixture**: This mixture does not contain any potentially hazardous products.
SECTION 4: First aid measures

4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NOx)

5.3 advice for firefighters

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

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

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

6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.
6.3 methods and material for containment and cleaning up

advice on how to contain a spill
covering of drains

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

appropriate containment techniques
use of adsorbent materials.

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

6.4 reference to other sections

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

SECTION 7: Handling and storage

7.1 precautions for safe handling

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

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

7.2 conditions for safe storage, including any incompatibilities

control of effects
protect against external exposure, such as
frost

7.3 specific end use(s)
see section 16 for a general overview.

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

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other safety parameters

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<td>relative density</td>
<td>information on this property is not available</td>
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<tr>
<td>solubility[ies]</td>
<td>not determined</td>
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<tr>
<td>partition coefficient</td>
<td></td>
</tr>
<tr>
<td>- n-octanol/water (log KOW)</td>
<td>this information is not available</td>
</tr>
</tbody>
</table>
auto-ignition temperature | not determined
viscosity | not determined
explosive properties | none
oxidising properties | none

9.2 other information | there is no additional information

SECTION 10: Stability and reactivity

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

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

10.3 possibility of hazardous reactions
no known hazardous reactions.

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

10.5 incompatible materials
there is no additional information.

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

SECTION 11: Toxicological information

11.1 information on toxicological effects
test data are not available for the complete mixture.

classification procedure
the method for classification of the mixture is based on ingredients of the mixture [additivity formula].

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

acute toxicity
shall not be classified as acutely toxic.

skin corrosion/irritation
shall not be classified as corrosive/irritant to skin.

serious eye damage/eye irritation
shall not be classified as seriously damaging to the eye or eye irritant.

respiratory or skin sensitisation
shall not be classified as a respiratory or skin sensitiser.

germ cell mutagenicity
shall not be classified as germ cell mutagenic.
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.
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

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<thead>
<tr>
<th>abbr.</th>
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<td>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]</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route [European Agreement concerning the International Carriage of Dangerous Goods by Road]</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
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<td>DGR</td>
<td>Dangerous Goods Regulations [see IATA/DGR]</td>
</tr>
<tr>
<td>GHS</td>
<td>“Globally Harmonized System of Classification and Labelling of Chemicals” developed by the United Nations</td>
</tr>
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<td>Dangerous Goods Regulations (DGR) for the air transport [IATA]</td>
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<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
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<td>International Maritime Dangerous Goods Code</td>
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**unDNA primer pair**

<table>
<thead>
<tr>
<th>abbr.</th>
<th>descriptions of used abbreviations</th>
</tr>
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<tbody>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships (abbr. of &quot;Marine Pollutant&quot;)</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses [Regulations concerning the International carriage of Dangerous goods by Rail]</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
</tr>
</tbody>
</table>

**key literature references and sources for data**


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

1.1 product identifier
   trade name: Mouse Sfi1 primer pair
   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 office hours: Mon-Fri 09:00 AM - 05:00 PM

<table>
<thead>
<tr>
<th>poison centre</th>
<th>country</th>
<th>name</th>
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<tbody>
<tr>
<td>United Kingdom</td>
<td>National Poisons Information Service</td>
<td>111</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

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

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

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

SECTION 3: Composition/information on ingredients

3.1 substances
   not relevant (mixture)

3.2 mixtures
   description of the mixture
   This mixture does not contain any potentially hazardous products.
SECTION 4: First aid measures

4.1 description of first aid measures

general notes

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

following inhalation

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

following skin contact

wash with plenty of soap and water.

following eye contact

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

following ingestion

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

4.2 most important symptoms and effects, both acute and delayed

symptoms and effects are not known to date.

4.3 indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 extinguishing media

suitable extinguishing media

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

unsuitable extinguishing media

water jet

5.2 special hazards arising from the substance or mixture

hazardous combustion products

nitrogen oxides (NOx)

5.3 advice for firefighters

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

SECTION 6: Accidental release measures

6.1 personal precautions, protective equipment and emergency procedures

for non-emergency personnel

remove persons to safety.

for emergency responders

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

6.2 environmental precautions

keep away from drains, surface and ground water. retain contaminated washing water and dispose of it.
6.3 methods and material for containment and cleaning up

- advice on how to contain a spill
  - covering of drains
- advice on how to clean up a spill
  - wipe up with absorbent material (e.g. cloth, fleece). collect spillage: sawdust, kieselgur (diatomite), sand, universal binder
- appropriate containment techniques
  - use of adsorbent materials.
- other information relating to spills and releases
  - place in appropriate containers for disposal. ventilate affected area.

6.4 reference to other sections

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

SECTION 7: Handling and storage

7.1 precautions for safe handling

- recommendations
  - measures to prevent fire as well as aerosol and dust generation
    - use local and general ventilation. use only in well-ventilated areas.
- advice on general occupational hygiene
  - wash hands after use. do not eat, drink and smoke in work areas. remove contaminated clothing and protective equipment before entering eating areas. never keep food or drink in the vicinity of chemicals. never place chemicals in containers that are normally used for food or drink. keep away from food, drink and animal feedingstuffs.

7.2 conditions for safe storage, including any incompatibilities

- control of effects
  - protect against external exposure, such as frost

7.3 specific end use(s)

  see section 16 for a general overview.

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

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<td>odour</td>
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other safety parameters

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</thead>
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<td>density</td>
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<td>partition coefficient</td>
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<td>- n-octanol/water (log KOW)</td>
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</tr>
</tbody>
</table>
## SECTION 10: Stability and reactivity

### 10.1 reactivity

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

### 10.2 chemical stability

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

### 10.3 possibility of hazardous reactions

No known hazardous reactions.

### 10.4 conditions to avoid

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

### 10.5 incompatible materials

There is no additional information.

### 10.6 hazardous decomposition products

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

## SECTION 11: Toxicological information

### 11.1 information on toxicological effects

Test data are not available for the complete mixture.

**classification procedure**

The method for classification of the mixture is based on ingredients of the mixture [additivity formula].

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

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

**acute toxicity**

Shall not be classified as acutely toxic.

**skin corrosion/irritation**

Shall not be classified as corrosive/irritant to skin.

**serious eye damage/eye irritation**

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

**respiratory or skin sensitisation**

Shall not be classified as a respiratory or skin sensitiser.

**germ cell mutagenicity**

Shall not be classified as germ cell mutagenic.
carcinogenicity
shall not be classified as carcinogenic.

reproductive toxicity
shall not be classified as a reproductive toxicant.

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

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

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

SECTION 12: Ecological information

12.1 toxicity
shall not be classified as hazardous to the aquatic environment.

12.2 persistence and degradability
data are not available.

12.3 bioaccumulative potential
data are not available.

12.4 mobility in soil
data are not available.

12.5 results of PBT and vPvB assessment
data are not available.

12.6 other adverse effects
data are not available.

SECTION 13: Disposal considerations

13.1 waste treatment methods
sewage disposal-relevant information
do not empty into drains. avoid release to the environment. Refer to special instructions/safety data sheets.

waste treatment of containers/packagings
completely emptied packages can be recycled. handle contaminated packages in the same way as the substance itself.

remarks
please consider the relevant national or regional provisions. waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.
SECTION 14: Transport information

14.1 UN number  
not subject to transport regulations

14.2 UN proper shipping name  
not relevant

14.3 transport hazard class(es)  
none

14.4 packing group  
not assigned to a packing group

14.5 environmental hazards  
non-environmentally hazardous acc. to the dangerous goods regulations

14.6 special precautions for user  
there is no additional information.

14.7 transport in bulk according to Annex II of MARPOL and the IBC Code  
the cargo is not intended to be carried in bulk.

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

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<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
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**Mouse Sfi1 primer pair**

**Safety Data Sheet**
according to Regulation (EC) No. 1907/2006 (REACH)

**key literature references and sources for data**


**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.