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

1.1 product identifier
   trade name Tagmentase (Tn5 transposase)
   registration number (REACH) not relevant (mixture)
   product code(s) C01070010

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

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 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], carbon monoxide [CO], carbon dioxide [CO2]

5.3 advice for firefighters
in case of fire and/or explosion do not breathe fumes. co-ordinate firefighting measures to the fire surroundings. do not 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.
8.1 control parameters

<table>
<thead>
<tr>
<th>country</th>
<th>name of agent</th>
<th>CAS No</th>
<th>identifier</th>
<th>TWA [ppm]</th>
<th>TWA [mg/m³]</th>
<th>STEL [ppm]</th>
<th>STEL [mg/m³]</th>
<th>Ceiling-C [ppm]</th>
<th>Ceiling-C [mg/m³]</th>
<th>notation</th>
<th>source</th>
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<tbody>
<tr>
<td>GB</td>
<td>glycerol</td>
<td>56-81-5</td>
<td>WEL</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>mist</td>
<td>EH40/2005</td>
</tr>
</tbody>
</table>

**notation**
- Ceiling-C: ceiling value is a limit value above which exposure should not occur
- mist: as mists
- 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.

9.1 information on basic physical and chemical properties

**appearance**

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</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>
</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>
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</table>

#### partition coefficient

<table>
<thead>
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<th>Parameter</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>- n-octanol/water (log KOW)</td>
<td>this information is not available</td>
</tr>
<tr>
<td>auto-ignition temperature</td>
<td>not determined</td>
</tr>
<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

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

#### 10.3 possibility of hazardous reactions

- no known hazardous reactions.

#### 10.4 conditions to avoid

- there are no specific conditions known which have to be avoided.
10.5 incompatible materials
    oxidisers

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

SECTION 11: Toxicological information

11.1 information on toxicological effects
    test data are not available for the complete mixture.
    classification procedure
    the method for classification of the mixture is based on ingredients of the mixture [additivity formula].
    classification according to GHS (1272/2008/EC, CLP)
    this mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.
    acute toxicity
    shall not be classified as acutely toxic.
    skin corrosion/irritation
    shall not be classified as corrosive/irritant to skin.
    serious eye damage/eye irritation
    shall not be classified as seriously damaging to the eye or eye irritant.
    respiratory or skin sensitisation
    shall not be classified as a respiratory or skin 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

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>
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<tr>
<td>1.1</td>
<td>product code(s): C07010010</td>
<td>product code(s): C01070010</td>
<td>yes</td>
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</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>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>
</tr>
<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.