SAFETY DATA SHEET

T4 Endonuclease VII

Section 1. Identification

GHS product identifier : T4 Endonuclease VII
Code : 78300
Other means of identification : Not available.
Supplier/Manufacturer : 3420 Central Expressway, Santa Clara CA 95051
In case of emergency : Chemtrec: 1 800 424 9300
Outside USA & Canada: +1 703 527 3887

Section 2. Hazards identification

OSHA/HCS status : T4 Endonuclease VII
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
T4 Endonuclease VII Dilution Buffer
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : T4 Endonuclease VII
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B
T4 Endonuclease VII Dilution Buffer
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B

GHS label elements
Signal word : T4 Endonuclease VII
Warning
T4 Endonuclease VII Dilution Buffer
Warning

Hazard statements : T4 Endonuclease VII
Causes eye irritation.
T4 Endonuclease VII Dilution Buffer
Causes eye irritation.

Precautionary statements
General : T4 Endonuclease VII
Not applicable.
T4 Endonuclease VII Dilution Buffer
Not applicable.

Prevention : T4 Endonuclease VII
Wear eye or face protection. Wash hands thoroughly after handling.
T4 Endonuclease VII Dilution Buffer
Wear eye or face protection. Wash hands thoroughly after handling.

Response : T4 Endonuclease VII
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
T4 Endonuclease VII Dilution Buffer
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : T4 Endonuclease VII
Not applicable.
T4 Endonuclease VII Dilution Buffer
Not applicable.

Disposal : T4 Endonuclease VII
Not applicable.
T4 Endonuclease VII Dilution Buffer
Not applicable.

Supplemental label elements : T4 Endonuclease VII
None known.
T4 Endonuclease VII Dilution Buffer
None known.
Section 2. Hazards identification

Hazard not otherwise classified:
- T4 Endonuclease VII: None known.
- T4 Endonuclease VII Dilution Buffer: None known.

Section 3. Composition/information on ingredients

Substance/mixture: Mixture

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>T4 Endonuclease VII</td>
<td>25 - 50</td>
<td>56-81-5</td>
</tr>
<tr>
<td>glycerol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T4 Endonuclease VII Dilution Buffer</td>
<td>25 - 50</td>
<td>56-81-5</td>
</tr>
<tr>
<td>glycerol</td>
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</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

**Eye contact**
- T4 Endonuclease VII
  - Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
- T4 Endonuclease VII Dilution Buffer
  - Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.

**Inhalation**
- T4 Endonuclease VII
  - Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, perform recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- T4 Endonuclease VII Dilution Buffer
  - Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, perform recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
## Section 4. First aid measures

<table>
<thead>
<tr>
<th>Skin contact</th>
<th>T4 Endonuclease VII</th>
<th>Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T4 Endonuclease VII Dilution Buffer</td>
<td>Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>T4 Endonuclease VII</td>
<td>Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</td>
</tr>
<tr>
<td></td>
<td>T4 Endonuclease VII Dilution Buffer</td>
<td>Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</td>
</tr>
</tbody>
</table>

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

| Eye contact | T4 Endonuclease VII | Causes eye irritation. |
|            |                     |                        |
|            | T4 Endonuclease VII Dilution Buffer | Causes eye irritation. |
| Inhalation | T4 Endonuclease VII | No known significant effects or critical hazards. |
|            | T4 Endonuclease VII Dilution Buffer | No known significant effects or critical hazards. |
| Skin contact | T4 Endonuclease VII | No known significant effects or critical hazards. |
|            | T4 Endonuclease VII Dilution Buffer | No known significant effects or critical hazards. |
| Ingestion  | T4 Endonuclease VII | May be irritating to mouth, throat and stomach. |
|            | T4 Endonuclease VII Dilution Buffer | May be irritating to mouth, throat and stomach. |

### Over-exposure signs/symptoms
Section 4. First aid measures

**Eye contact**
- T4 Endonuclease VII
- T4 Endonuclease VII Dilution Buffer

Adverse symptoms may include the following:
- Irritation
- Watering
- Redness

**Inhalation**
- T4 Endonuclease VII
- T4 Endonuclease VII Dilution Buffer

No specific data.

**Skin contact**
- T4 Endonuclease VII
- T4 Endonuclease VII Dilution Buffer

No specific data.

**Ingestion**
- T4 Endonuclease VII
- T4 Endonuclease VII Dilution Buffer

No specific data.

**Protection of first-aiders**
- No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**Notes to physician**
- Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments**
- No specific treatment.

**Indication of immediate medical attention and special treatment needed, if necessary**

See toxicological information (Section 11)

Section 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media**
- T4 Endonuclease VII
- T4 Endonuclease VII Dilution Buffer

Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media**
- T4 Endonuclease VII
- T4 Endonuclease VII Dilution Buffer

None known.

**Specific hazards arising from the chemical**
- T4 Endonuclease VII
- T4 Endonuclease VII Dilution Buffer

In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products**
- T4 Endonuclease VII
- T4 Endonuclease VII Dilution Buffer

Decomposition products may include the following materials:
- Carbon dioxide
- Carbon monoxide
Section 5. Fire-fighting measures

Special protective actions for fire-fighters: T4 Endonuclease VII
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: T4 Endonuclease VII Dilution Buffer
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures: T4 Endonuclease VII
Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
## Section 7. Handling and storage

**Advice on general occupational hygiene**

**T4 Endonuclease VII**

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**T4 Endonuclease VII Dilution Buffer**

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities**

**T4 Endonuclease VII**

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

**T4 Endonuclease VII Dilution Buffer**

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T4 Endonuclease VII</strong></td>
<td></td>
</tr>
<tr>
<td>glycerol</td>
<td></td>
</tr>
<tr>
<td><strong>OSHA PEL 1989 (United States, 3/1989).</strong></td>
<td></td>
</tr>
<tr>
<td>TWA: 5 mg/m³ 8 hours. Form: Respirable fraction</td>
<td></td>
</tr>
<tr>
<td><strong>OSHA PEL (United States, 2/2013).</strong></td>
<td></td>
</tr>
<tr>
<td>TWA: 10 mg/m³ 8 hours. Form: Total dust</td>
<td></td>
</tr>
<tr>
<td><strong>T4 Endonuclease VII Dilution Buffer</strong></td>
<td></td>
</tr>
<tr>
<td><strong>OSHA PEL 1989 (United States, 3/1989).</strong></td>
<td></td>
</tr>
<tr>
<td>TWA: 5 mg/m³ 8 hours. Form: Respirable fraction</td>
<td></td>
</tr>
<tr>
<td><strong>OSHA PEL (United States, 2/2013).</strong></td>
<td></td>
</tr>
<tr>
<td>TWA: 15 mg/m³ 8 hours. Form: Total dust</td>
<td></td>
</tr>
</tbody>
</table>
Section 8. Exposure controls/personal protection

| TWA: 5 mg/m³ 8 hours. Form: Respirable fraction  
| TWA: 10 mg/m³ 8 hours. Form: Total dust  
| OSHA PEL (United States, 2/2013).  
| TWA: 5 mg/m³ 8 hours. Form: Respirable fraction  
| TWA: 15 mg/m³ 8 hours. Form: Total dust |

**Appropriate engineering controls**
- Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls**
- Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures**
- Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
- Appropriate techniques should be used to remove potentially contaminated clothing.
- Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**
- Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin protection**

**Hand protection**
- Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection**
- Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**
- Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**
- Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

**Physical state**
- T4 Endonuclease VII: Liquid.
- T4 Endonuclease VII Dilution Buffer: Liquid.

**Color**
- T4 Endonuclease VII: Not available.
- T4 Endonuclease VII Dilution Buffer: Not available.
### Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>T4 Endonuclease VII</th>
<th>T4 Endonuclease VII Dilution Buffer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
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</tr>
<tr>
<td>Flash point</td>
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</tr>
<tr>
<td>Auto-ignition temperature</td>
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<td>Flammable limits</td>
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<td>Molecular weight</td>
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<td>Molecular formula</td>
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<td>Relative density</td>
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<td>Viscosity</td>
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<td>Solubility</td>
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<td>Physical/chemical properties comments</td>
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Section 10. Stability and reactivity

Reactivity

<table>
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<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
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</table>

No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
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The product is stable.

Possibility of hazardous reactions

<table>
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<tr>
<th>Product/ingredient name</th>
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</table>

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
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No specific data.

Incompatible materials

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
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No specific data.

Hazardous decomposition products

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
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</tbody>
</table>

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
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</tr>
<tr>
<td>LD50 Dermal</td>
<td></td>
<td>Rat</td>
<td>21900 mg/kg</td>
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<td>LD50 Oral</td>
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<td>Rat</td>
<td>12600 mg/kg</td>
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<td>LD50 Oral</td>
<td></td>
<td>Rat</td>
<td>12600 mg/kg</td>
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</table>

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
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<tbody>
<tr>
<td>T4 Endonuclease VII</td>
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<td></td>
<td></td>
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<tr>
<td>glycerol</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eyes - Mild irritant</td>
<td></td>
<td>Rabbit</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin - Mild irritant</td>
<td></td>
<td>Rabbit</td>
<td>-</td>
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<td></td>
</tr>
<tr>
<td></td>
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<tr>
<td>T4 Endonuclease VII Dilution Buffer</td>
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</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>Eyes - Mild irritant</td>
<td></td>
<td>Rabbit</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin - Mild irritant</td>
<td></td>
<td>Rabbit</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section 11. Toxicological information

- **Sensitization**
  - Not available.

- **Mutagenicity**
  - Not available.

- **Carcinogenicity**
  - Not available.

- **Reproductive toxicity**
  - Not available.

- **Teratogenicity**
  - Not available.

- **Specific target organ toxicity (single exposure)**
  - Not available.

- **Specific target organ toxicity (repeated exposure)**
  - Not available.

- **Aspiration hazard**
  - Not available.

Information on the likely routes of exposure: Not available.

**Potential acute health effects**

- **Eye contact**: 
- **Inhalation**: 
- **Skin contact**: 
- **Ingestion**: 

**Symptoms related to the physical, chemical and toxicological characteristics**

- **Eye contact**: 
- **Inhalation**: 
- **Skin contact**: 
- **Ingestion**: 

Delayed and immediate effects and also chronic effects from short and long term exposure

- **Short term exposure**
  - **Potential immediate effects**: Not available.
  - **Potential delayed effects**: Not available.

- **Long term exposure**
  - **Potential immediate effects**: 
  - **Potential delayed effects**: 

**Potential chronic health effects**

Not available.
Section 11. Toxicological information

General :
Carcinogenicity :
Mutagenicity :
Teratogenicity :
Developmental effects :
Fertility effects :

Numerical measures of toxicity
Acute toxicity estimates
Not available.

Interactive effects :

Other information :

Section 12. Ecological information

Toxicity
Not available.

Persistence and degradability
Not available.

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP_{ow}</th>
<th>BCF</th>
<th>Potential</th>
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</thead>
<tbody>
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<td>T4 Endonuclease VII glycerol</td>
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<td>low</td>
</tr>
<tr>
<td>T4 Endonuclease VII Dilution Buffer glycerol</td>
<td>-1.76</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

Mobility in soil

Soil/water partition coefficient (K_{OC}) :
T4 Endonuclease VII Not available.
T4 Endonuclease VII Dilution Buffer Not available.

Mobility :

Other adverse effects :
No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods :
The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a
Section 13. Disposal considerations

safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

<table>
<thead>
<tr>
<th>DOT Classification</th>
<th>TDG Classification</th>
<th>Mexico Classification</th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
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<tr>
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<td>Packing group</td>
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<tr>
<td>Additional information</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Special precautions for user: **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available.

Section 15. Regulatory information

U.S. Federal regulations: **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed

Clean Air Act Section 602 Class I Substances: Not listed

Clean Air Act Section 602 Class II Substances: Not listed

DEA List I Chemicals (Precursor Chemicals): Not listed

DEA List II Chemicals (Essential Chemicals): Not listed

SARA 302/304 Composition/information on ingredients
Section 15. Regulatory information

No products were found.

SARA 304 RQ : Not applicable.
SARA 311/312 Classification : Immediate (acute) health hazard

<table>
<thead>
<tr>
<th>Composition/information on ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>glycerol</td>
</tr>
<tr>
<td>glycerol</td>
</tr>
</tbody>
</table>

State regulations

Massachusetts : The following components are listed: GLYCERINE MIST
New York : None of the components are listed.
New Jersey : The following components are listed: GLYCERIN; 1,2,3-PROPANETRIOL
Pennsylvania : The following components are listed: 1,2,3-PROPANETRIOL

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals
Not listed.

Montreal Protocol (Annexes A, B, C, E)
Not listed.

Stockholm Convention on Persistent Organic Pollutants
Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)
Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals
Not listed.

Canada

WHMIS (Canada) : T4 Endonuclease VII Not controlled under WHMIS (Canada).
               : T4 Endonuclease VII Dilution Buffer Not controlled under WHMIS (Canada).

Canadian lists

Canadian NPRI : None of the components are listed.
CEPA Toxic substances : None of the components are listed.
Canada inventory : All components are listed or exempted.
Section 16. Other information

Hazardous Material Information System (U.S.A.)

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Health</td>
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<tr>
<td>Flammability</td>
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<tr>
<td>Physical hazards</td>
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</table>

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
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<tr>
<td>Health</td>
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<tr>
<td>Instability/Reactivity</td>
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History

Date of issue/Date of revision: 06/23/2016.

Date of previous issue: No previous validation.

Version: 1

Key to abbreviations:

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.