# 1. Identification of the substance/mixture and of the company/undertaking

## Identification of the substance/preparation

<table>
<thead>
<tr>
<th>Product code</th>
<th>12604013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>TrypLE™ Express Stable Trypsin Replacement Enzyme without Phenol Red</td>
</tr>
</tbody>
</table>

## Company/Undertaking Identification

<table>
<thead>
<tr>
<th>Life Technologies</th>
<th>INVITROGEN CORPORATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>5791 VAN ALLEN WAY</td>
<td>5250 MAINWAY DRIVE</td>
</tr>
<tr>
<td>PO BOX 6482</td>
<td>BURLINGTON, ONT</td>
</tr>
<tr>
<td>CARLSBAD, CA 92008</td>
<td>CANADA L7L 6A4</td>
</tr>
<tr>
<td>+1 760 603 7200</td>
<td>800/263-6236</td>
</tr>
</tbody>
</table>

### 24 hour Emergency Response (Transport):

- 866-536-0631
- 301-431-8585
- Outside of the U.S. +1-301-431-8585

For research use only. Not intended for human or animal diagnostic or therapeutic uses.
2. Hazards identification

GHS - Classification

Signal Word
not hazardous

Health Hazard
not hazardous

Physical Hazards
not hazardous

Principle Routes of Exposure/
Potential Health effects

<table>
<thead>
<tr>
<th></th>
<th>Eyes</th>
<th>Skin</th>
<th>Inhalation</th>
<th>Ingestion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>May cause eye irritation with susceptible persons.</td>
<td>May cause skin irritation in susceptible persons.</td>
<td>May be harmful by inhalation.</td>
<td>May be harmful if swallowed.</td>
</tr>
</tbody>
</table>

Specific effects

<table>
<thead>
<tr>
<th></th>
<th>Carcinogenic effects</th>
<th>Mutagenic effects</th>
<th>Reproductive toxicity</th>
<th>Sensitization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>none</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
</tbody>
</table>

Target Organ Effects

No known effects under normal use conditions.

HMIS

<table>
<thead>
<tr>
<th></th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. Composition/information on ingredients

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

4. First aid measures
## Skin contact
Rinse with plenty of water. If symptoms arise, call a physician.

## Eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

## Ingestion
Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.

## Inhalation
Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

## Notes to physician
Treat symptomatically.

### 5. Fire-fighting measures

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Special protective equipment for firefighters</td>
<td>Wear self-contained breathing apparatus and protective suit.</td>
</tr>
</tbody>
</table>

### 6. Accidental release measures

<table>
<thead>
<tr>
<th>Personal precautions</th>
<th>Use personal protective equipment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods for cleaning up</td>
<td>Soak up with inert absorbent material.</td>
</tr>
</tbody>
</table>

**Environmental precautions**

Prevent further leakage or spillage if safe to do so.

See Section 12 for additional information.

### 7. Handling and storage

<table>
<thead>
<tr>
<th>Handling</th>
<th>Always wear recommended Personal Protective Equipment. No special handling advice required.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage</td>
<td>Keep in a dry, cool and well-ventilated place.</td>
</tr>
</tbody>
</table>

### 8. Exposure controls/personal protection

#### Exposure limits

We are not aware of any national exposure limit.

#### Engineering measures

Ensure adequate ventilation, especially in confined areas.

#### Personal protective equipment

**Respiratory protection**
In case of insufficient ventilation wear suitable respiratory equipment.

**Hand protection**
Impervious gloves.

**Eye protection**
Safety glasses with side-shields.

**Skin and body protection.**
Lightweight protective clothing.

**Hygiene measures**
Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls**
Prevent product from entering drains.
## 9. Physical and chemical properties

### General Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>°C no data available</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>°C no data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>°C no data available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>°C no data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available.</td>
</tr>
<tr>
<td>Water solubility</td>
<td>soluble</td>
</tr>
</tbody>
</table>

## 10. Stability and reactivity

### Stability

Stable under normal conditions.

### Materials to avoid

No dangerous reaction known under conditions of normal use.

### Hazardous decomposition products

None under normal use.

### Polymerization

Hazardous polymerisation does not occur.

## 11. Toxicological information

### Acute toxicity

not hazardous

### Principle Routes of Exposure/

#### Potential Health effects

- **Eyes**: May cause eye irritation with susceptible persons.
- **Skin**: May cause skin irritation in susceptible persons.
- **Inhalation**: May be harmful by inhalation.
- **Ingestion**: May be harmful if swallowed.

- **Carcinogenic effects**: none
- **Mutagenic effects**: none
- **Reproductive toxicity**: none
- **Sensitization**: none

### Target Organ Effects

No known effects under normal use conditions.

## 12. Ecological information

### Ecotoxicity effects

No information available.

### Mobility

No information available.

### Biodegradation

Inherently biodegradable

### Bioaccumulation

Does not bioaccumulate.

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Revision Date: 27-Dec-2011
Product code: 12604013
Product name: TrypLE™ Express Stable Trypsin Replacement Enzyme without Phenol Red

www.lifetechnologies.com
13. Disposal considerations

Dispose of in accordance with local regulations.

14. Transport information

<table>
<thead>
<tr>
<th>IATA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name</td>
<td>Not classified as dangerous in the meaning of transport regulations</td>
</tr>
<tr>
<td>Hazard class</td>
<td>none</td>
</tr>
<tr>
<td>Subsidiary Class</td>
<td>none</td>
</tr>
<tr>
<td>Packing group</td>
<td>none</td>
</tr>
<tr>
<td>UN-No</td>
<td>None</td>
</tr>
</tbody>
</table>

15. Regulatory information

U.S. Federal Regulations

SARA 313
This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain HAPs.

U.S. State Regulations

California Proposition 65
This product does not contain chemicals listed under Proposition 65

WHMIS hazard class:
Non-controlled

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. Other information

Reason for Revision
(M)SDS sections updated.

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

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End of Safety Data Sheet