

# Safety Data Sheet

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

### Identification of the substance or mixture

**Product code** 15090046  
**Product name** TRYPSIN, 2.5%, 10X

### Company/undertaking identification

Life Technologies Corporation  
5781 Van Allen Way  
PO Box 6482  
Carlsbad, CA 92008  
+1 760 603 7200

Life Technologies  
5250 Mainway Drive  
Burlington, ONT  
CANADA L7L 6A4  
800/263-6236

**24 hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident. Spill, Leak, Fire, Exposure, or Accident. Call CHEMTREC** Within the USA + Canada: 1-800-424-9300 and +1 703-527-3887  
Outside the USA + Canada: +1 703-741-5970

### Country specific Emergency Number (if available):

CHEMTREC Brazil (Rio De Janeiro) +(55)-2139581449 (português)

**CAUTION: For use as a raw material component in further manufacturing applications.**

## SECTION 2: Hazards identification

### GHS - Classification

**Signal Word**  
DANGER

### Hazard pictograms



### Health hazards

Skin corrosion/irritation	Category 3
Respiratory sensitization	Category 1

### Physical hazards

Not Hazardous

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**Environmental hazards**

Not Hazardous

**Hazard Statements**

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H316 - Causes mild skin irritation

**Precautionary Statements****Prevention**

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P284 - In case of inadequate ventilation wear respiratory protection

**Response**

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

P332 + P313 - If skin irritation occurs: Get medical advice/attention

**Storage**

Not Applicable

**Disposal**

P501 - Dispose of contents/ container to an approved waste disposal plant

**Other hazards**

Not Applicable

**HMIS**

Health	4
Flammability	0
Reactivity	0

## SECTION 3: Composition/information on ingredients

Component	CAS-No	EINECS-No	Weight %
Trypsin 9002-07-7 ( 1 - 5 )	9002-07-7	232-650-8	1 - 5

We recommend handling all chemicals with caution.

## SECTION 4: First aid measures

### Description of first aid measures

<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Immediate medical attention is required.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Get medical attention if symptoms occur.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.
<b>Notes to Physician</b>	Treat symptomatically.

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

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled H316 - Causes mild skin irritation

### Indication of any immediate medical attention and special treatment needed

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

## SECTION 5: Firefighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	Water spray. Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical.
<b>Unsuitable extinguishing media</b>	No information available.

**Special hazards arising from the substance or mixture** Not known.

**Advice for fire-fighters** Wear self-contained breathing apparatus and protective suit.

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protection equipment. See Section 8 for more detail.

### Environmental precautions

No special environmental precautions required.

### Methods and material for containment and cleaning up

Soak up with inert absorbent material.

### Reference to other sections

See section 8 for more information.

## SECTION 7: Handling and storage

### Precautions for safe handling

Always wear recommended Personal Protective Equipment. See Section 8 for more detail. Do not get in eyes, on skin, or on clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator.

### Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers. Store in accordance with local regulations.

### Specific end use(s)

CAUTION: For use as a raw material component in further manufacturing applications.

## SECTION 8: Exposure controls/personal protection

### Control parameters

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Trypsin	None	None	None	None

**Engineering measures**      Ensure adequate ventilation, especially in confined areas

### Exposure controls

#### Personal Protective Equipment

**Respiratory protection**      In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

**Hand protection**      Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.

**Eye protection**      Tight sealing safety goggles

**Skin and Body Protection**      Wear laboratory coat for body protection

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

#### Environmental exposure controls

No special environmental precautions required.

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

<b>Appearance</b>	liquid	
<b>Odor</b>	Mixture has not been tested	
<b>Odor Threshold</b>	Mixture has not been tested	
<b>pH</b>	No data available	
<b>Melting point / melting range</b>	°C Mixture has not been tested	°F Mixture has not been tested
<b>Boiling point / boiling range</b>	°C Mixture has not been tested	°F Mixture has not been tested
<b>Flash point</b>	°C Mixture has not been tested	°F Mixture has not been tested
<b>Autoignition Temperature</b>	°C Mixture has not been tested	°F Mixture has not been tested
<b>Decomposition temperature</b>	°C Mixture has not been tested	°F Mixture has not been tested
<b>Evaporation rate</b>	No data available	
<b>Flammability (solid, gas)</b>	Not Applicable	
<b>Upper explosion limit</b>	Mixture has not been tested	
<b>Lower explosion limit</b>	Mixture has not been tested	
<b>Vapor Pressure</b>	Mixture has not been tested	
<b>Relative density</b>	Mixture has not been tested	
<b>Specific gravity</b>	No data available	
<b>Solubility</b>	Mixture has not been tested	
<b>Partition coefficient: n-octanol/water</b>	No data available	
<b>Viscosity</b>	Mixture has not been tested	
<b>Explosive properties</b>	Mixture has not been tested	
<b>Oxidizing properties</b>	Mixture has not been tested	
<b>Other information</b>	No data available	

## SECTION 10: Stability and reactivity

<b>Reactivity</b>	None known.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous reaction has not been reported.
<b>Conditions to avoid</b>	None known.
<b>Incompatible materials</b>	No dangerous reaction known under conditions of normal use.
<b>Hazardous decomposition products</b>	No known hazardous decomposition products.

## SECTION 11: Toxicological information

### Information on toxicological effects

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Trypsin	> 5 g/kg (Rat)	No data available	No data available

### Principal Routes of Exposure

<b>Irritation</b>	Mild skin irritant
<b>Corrosivity</b>	Conclusive but not sufficient for classification
<b>Sensitization</b>	May cause sensitization by inhalation
<b>STOT - Single Exposure</b>	Conclusive but not sufficient for classification
<b>STOT - Repeated Exposure</b>	Conclusive but not sufficient for classification
<b>Carcinogenicity</b>	Conclusive but not sufficient for classification
<b>Mutagenicity</b>	Conclusive but not sufficient for classification
<b>Reproductive toxicity</b>	Conclusive but not sufficient for classification
<b>Aspiration hazard</b>	Conclusive but not sufficient for classification

## SECTION 12: Ecological information

### Toxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Trypsin	No data available	No data available	No data available	No data available	No data available

**Persistence and degradability** No information available.

**Bioaccumulative potential** No information available.

### Results of PBT and vPvB assessment

No information available.

**Other adverse effects** No information available.

## SECTION 13: Disposal considerations

### Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

## SECTION 14: Transport information

### IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations.

**UN number** Not Applicable

**UN proper shipping name** Not Applicable

**Transport hazard class(es)** Not Applicable

**Packing group** Not Applicable

**Environmental hazards** Not Applicable

**Special precautions for user** Not Applicable

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not Applicable.

## SECTION 15: Regulatory information

Component	US TSCA
Trypsin 9002-07-7 ( 1 - 5 )	Listed

### US 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 contains HAPs.

### US State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

#### **WHMIS Hazard Class**

D2A - Very toxic materials



This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

## SECTION 16: Other information

**Reason for revision** SDS sections updated.

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**Revision date** 19-Sep-2017

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#### **References**

- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>
- eChemPortal: <http://www.echemportal.org/>
- LOLI database: <https://www.chemadvisor.com/loli-database>

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

**End of Safety Data Sheet**