



# Safety Data Sheet

日本

## 1. Product and company identification

**Product name** TRYPSIN 0.25% (1X) Solution, with 2.5 g Porcine Trypsin (Irradiated) (1:250)/L in HBSS, w/o Calcium, Magnesium, with EDTA, 100ML, 20 pack

**Catalogue Number** SH30042.20B

**Product type** Liquid.

**Original preparation date** 4/30/2015

**Date of issue/Date of revision** 2/5/2026

**Date of previous issue** 1/30/2021

### Relevant identified uses of the substance or mixture and uses advised against

For Further Manufacturing or Research Use. Not for Diagnostic or Therapeutic Use.

#### Supplier / Manufacturer

Cytiva Austria  
Kremlstr. 5  
4061 Pasching  
AUSTRIA  
Tel. (+43) 7229 64865  
Fax (+43) 7229 64866

HyClone Laboratories  
925 West 1800 South  
Logan, Utah 84321  
Phone: (435) 792-8000

---

グローバルライフサイエンステクノロジーズジャパン株式会社  
新宿区百人町三丁目25番1号  
サンケンビルディング  
東京都  
169-0073  
日本  
+81-(0)3-5331-9336

Cytiva Singapore  
1 Maritime Square #13-01  
Harbourfront Centre  
Singapore 099253

## 2. Hazards identification

**GHS Classification** Not classified.

### GHS label elements

**Signal word** No signal word.

**Hazard statements** No known significant effects or critical hazards.

#### Precautionary statements

##### General

**Prevention** Not applicable.

**Response** Not applicable.

**Storage** Not applicable.

**Disposal** Not applicable.

**Other hazards which do not result in classification** None known.

### 3. Composition/information on ingredients

Substance/mixture	Mixture	含有量(%)	Identifiers	Official Gazette notice reference number	CSCL	ISHL
sodium chloride		<1.0296	CAS: 7647-14-5	1-236	Not available.	
trypsin		0.25	CAS: 9002-07-7	Not available.	11-(2)-267	

### 4. First aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
<b>Skin contact</b>	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
<b>Eye contact</b>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
<b>Ingestion</b>	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

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

##### Potential acute health effects

<b>Inhalation</b>	No known significant effects or critical hazards.
<b>Skin contact</b>	No known significant effects or critical hazards.
<b>Eye contact</b>	No known significant effects or critical hazards.
<b>Ingestion</b>	No known significant effects or critical hazards.

##### Short term exposure

<b>Potential delayed effects</b>	Not available.
----------------------------------	----------------

##### Over-exposure signs/symptoms

<b>Inhalation</b>	No specific data.
<b>Skin contact</b>	No specific data.
<b>Eye contact</b>	No specific data.
<b>Ingestion</b>	No specific data.

##### Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training.

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

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use an extinguishing agent suitable for the surrounding fire.
-------------------------------------	---

<b>Unsuitable extinguishing media</b>	None known.
---------------------------------------	-------------

<b>Specific hazards arising from the chemical</b>	In a fire or if heated, a pressure increase will occur and the container may burst.
---	---

<b>Special protective actions for fire-fighters</b>	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.
---	---

<b>Special protective equipment for fire-fighters</b>	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
---	---

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	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. Put on appropriate personal protective equipment.
------------------------------------	---

<b>For emergency responders</b>	If specialized 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".
---------------------------------	---

<b>Environmental precautions</b>	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).
----------------------------------	---

<b>Small spill</b>	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
<b>Large spill</b>	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. 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.

## 7. Handling and storage

### Handling

<b>Protective measures</b>	Put on appropriate personal protective equipment (see Section 8).
<b>Advice on general occupational hygiene</b>	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.

### Storage

<b>Conditions for safe storage</b>	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. See Section 10 for incompatible materials before handling or use.
------------------------------------	--

## 8. Exposure controls/personal protection

<b>Appropriate engineering controls</b>	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
---	--

### Occupational exposure limits

### Biological exposure indices

No exposure indices known.

### Individual protection measures

<b>Respiratory protection</b>	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
<b>Hand protection</b>	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.
<b>Eye protection</b>	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: safety glasses with side-shields.
<b>Skin protection</b>	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. 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.

## 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

<b>Physical state</b>	Liquid.
<b>Color</b>	Clear. Reddish
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	7.2 to 8
<b>Melting point/freezing point</b>	Not available.
<b>Boiling point or initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability</b>	Not available.
<b>Lower and upper explosive (flammable) limits</b>	Not available.
<b>Vapor pressure</b>	Not available.

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
water	17.5	2.3				
<b>Relative vapor density</b>	Not available.					
<b>Relative density</b>	Not available.					
<b>Solubility in water</b>	Not available.					
<b>Partition coefficient: n-octanol/water</b>	Not applicable.					
<b>Auto-ignition temperature</b>	Not available.					
<b>Decomposition temperature</b>	Not available.					
<b>Viscosity</b>	Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): Not available.					
<b>Particle characteristics</b>						
<b>Median particle size</b>	Not applicable.					
<b>SADT</b>	Not available.					
<b>Viscosity</b>	Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): Not available.					
<b>Flow time (ISO 2431)</b>	Not available.					
<b>Burning rate</b>	Not applicable.					
<b>Burning time</b>	Not applicable.					

## 10. Stability and reactivity

<b>Reactivity</b>	No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	The product is stable.
<b>Possibility of hazardous reactions</b>	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	No specific data.
<b>Incompatible materials</b>	No specific data.
<b>Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. Toxicological information

### Acute toxicity

Product/ingredient name	Result
trypsin	Rat - Oral - LD50 >5 g/kg

### Acute toxicity estimates

N/A

### Skin corrosion/irritation

Not available.

**Conclusion/Summary [Product]** Not available.

### Serious eye damage/eye irritation

Not available.

**Conclusion/Summary [Product]** Not available.

### Respiratory corrosion/irritation

Not available.

**Conclusion/Summary [Product]** Not available.

### Respiratory or skin sensitization

**Skin**

**Conclusion/Summary [Product]** Not available.

**Respiratory**

**Conclusion/Summary [Product]** Not available.

**Germ cell mutagenicity**

Not available.

**Conclusion/Summary [Product]** Not available.

**Carcinogenicity**

Not available.

**Conclusion/Summary [Product]** Not available.

**Reproductive toxicity**

Not available.

**Conclusion/Summary [Product]** Not available.

**Specific target organ toxicity (single exposure)**

Not available.

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Not available.

---

## 12. Ecological information

**Toxicity**

**Product/ingredient name**

sodium chloride

**Result**

**Acute - LC50 - Fresh water**

Fish - Striped bass - *Morone saxatilis* - Larvae  
1000 mg/l [96 hours]  
Effect: Mortality

**Chronic - NOEC - Fresh water**

Daphnia - Water flea - *Daphnia pulex*  
0.314 g/l [21 days]  
Effect: Reproduction

**Chronic - NOEC - Fresh water**

Fish - Eastern mosquitofish - *Gambusia holbrooki* - Adult  
100 mg/l [8 weeks]  
Effect: Reproduction

**Chronic - NOEC - Fresh water**

OECD  
Aquatic plants - Duckweed - *Lemna minor*  
6 g/l [96 hours]  
Effect: Growth

**Acute - EC50 - Fresh water**

Daphnia - Water flea - *Daphnia magna*  
402.6 mg/l [48 hours]  
Effect: Intoxication

**Acute - EC50 - Fresh water**

Algae - Green algae - *Seleniastrum capricornutum*  
28.85 mg/dm<sup>3</sup> [72 hours]  
Effect: Population

Persistence/degradability

Not available.

**Conclusion/Summary [Product]** Not available.

Bioaccumulative potential

Not available.

Mobility in soil

**Soil/Water partition coefficient** Not available.

**Mobility** Not available.

**Hazardous to the ozone layer** Not applicable.

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

---

## 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 safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

---

## 14. Transport information

**UN**

**IMDG**

**IATA**

**UN number** Not available. Not available. Not available.

**UN proper shipping name** Not available. Not available. Not available.

**Transport hazard class (es)** Not available. Not available. Not available.

**Packing group** - - -

**Environmental hazards** No. No. No.

**Additional information** - - -

**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 IMO instruments** Not available.

---

## 15. Regulatory information

**Fire Service Law**

None of the components are listed.

**Fire Service Law - Obstructive materials** Not listed

**Industrial Safety and Health Act**

Ordinance on the Prevention of the Hazard due to Specified Chemical Substances

**Organic solvents poisoning prevention** Not applicable.

Substance(s) requiring labelling

\* Any concentration shown as a range is to protect confidentiality.

Chemicals requiring notification

Ingredient name	%	Status	Reference number
trypsin	≤10	Listed	2-1394 * (2025-04)

\* Any concentration shown as a range is to protect confidentiality.

**Chemical substances that cause skin disorders, etc. and other chemical substances that must be handled with impermeable protective equipment etc. based on special chemical regulations. (Article 594-2 Paragraph 1 of Ordinance on ISH)**

None of the components are listed.

Carcinogens based on Article 577-2 of the Ordinance on ISH

None of the components are listed.

Mutagen

None of the components are listed.

**Corrosive liquid** Not listed

**ISHL Enforcement Order** Not available.  
**Appendix 1 - Dangerous Substances**

**Harmful Substances Subject to Obtaining Permission for Manufacturing** Not listed

**Harmful Substances, Prohibited for Manufacturing** Not listed

Chemical Substances Control Law (CSCL)

Sodium salt of 2,2',2'',2'''-(ethane-1,2-diyl)dinitro)tetraacetic acid	0.045	Priority assessment	268
--	-------	---------------------	-----

Poisonous and Deleterious Substances

None of the components are listed.

Pollutant Release and Transfer Registers (PRTR)

None of the components are listed.

**JSOH Carcinogen** Not listed

**Law concerning prevention of pollution of the ocean** Not available.

**Road law** Not available.

**List of Specially Controlled Industrial Waste** Not listed

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory

<b>Japan</b>	<b>Japan inventory (CSCL):</b> Not determined. <b>Japan inventory (ISHL):</b> Not determined.
<b>United States</b>	All components are active or exempted.
<b>Canada inventory</b>	All components are listed or exempted.
<b>China</b>	All components are listed or exempted.

## 16. Other information

### History

**Date of printing** 2/5/2026

**Date of issue/Date of revision** 2/5/2026

**Date of previous issue** 1/30/2021

**Version** 1.02

sds\_author@cytiva.com

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

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available

UN = United Nations

### Procedure used to derive the classification

#### **Classification**

#### **Justification**

Not classified.

### **References**

Not available.

 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.