

1 Identification

Product Name: Trypsin Solution 2.5% (10X)

Catalog Number: TRL03

Company: Caisson Laboratories

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Recommended Use: For research and laboratory use only.

Restrictions On Use: This product is intended for research and laboratory use only. Products are not to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals.

2 Hazard(s) Identification

Classification of the Substance or Mixture

GHS Classification: H315 - Skin irritation (Category 2)

H317 - Skin sensitization (Category 1)

H319 - Eye irritation (Category 2A)

H334 - Respiratory sensitization (Category 1)

H335 - Specific target organ toxicity - single exposure (Category 3) - Respiratory system.

GHS Label elements, including precautionary statements

Signal Word: Danger

Hazard Statements

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

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

H335 - May cause respiratory irritation.

Precautionary Statements

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 - Wash skin thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Pictograms:



3 Composition / Information on Ingredients

Component	CAS Number	EC Number	Concentrations (%)	Classification
Trypsin Powder from Porcine Pancreas	9002-07-7	232-650-8	2 - 3	Skin Irrit. 2; Eye Irrit. 2A; Resp. Sens. 1; Skin Sens. 1; STOT SE 3; H315, H317, H319, H334, H335

4 First-Aid Measures

General advice: If necessary, seek medical attention. Show this data sheet to the doctor in attendance. Move out of dangerous area.

Route of Exposure

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Call a physician or poison control center.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician if irritation persists.

In case of eye contact: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Consult a physician.

If inhaled: If inhaled, move to fresh air. If breathing becomes difficult, call a physician.

Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

Recommendation for immediate medical care and special treatment needed: No data available.

5 Fire-Fighting Measures

Suitable extinguishing media: Water spray, carbon dioxide, dry chemical powder or appropriate foam. Use extinguishing media suitable for surrounding fire.

Special protective equipment and precautions for fire-fighters: Wear self-contained breathing apparatus and protective clothing.

Special hazards arising from the substance or mixture: May emit toxic fumes under fire conditions.

Additional Information: No data available.

6 Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Avoid breathing vapors, mist or gas. Avoid contact with skin, eyes, or clothing. For personal protection see section 8.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleanup: Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7 Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

Conditions for safe storage: Keep in a tightly closed container and store in a cool, dry, and well-ventilated area. Protect from light.

Recommended storage temperature: 0 - 20°C

Incompatibilities: No data available.

8 Exposure Controls / Personal Protection

OSHA Permissible Exposure Limits (PELs): No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

ACGIH Threshold Limit Values (TLVs): No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Engineering controls: Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment (PPE)

Eye/face protection: Wear chemical safety glasses or goggles. Have eye-washing facilities readily available where eye contact can occur.

Skin protection: Wear protective gloves.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN(EU).

Body protection: Wear lab coat, gown, or coveralls to protect from exposure.

9 Physical and Chemical Properties

Appearance: Form: Liquid

pH: 7.0 - 8.0

Solubility: No data available

Specific Gravity: No data available

Melting Range: No data available

Odor: No data available

Odor Threshold: No data available

Viscosity: No data available

Relative Density: No data available

Evaporation Rate: No data available

Initial Boiling Point and Boiling Range: No data available

Flash Point: No data available

Flammability (Solid, gas): No data available

Flammability Upper/Lower Limits: No data available

Partition Coefficient: n-octanol/water: No data available

Vapor Density: No data available

Vapor Pressure: No data available

Auto-ignition Temperature: No data available

Decomposition Temperature: No data available

10 Stability and Reactivity

Reactivity: No data available.

Chemical stability: Stable under recommended storage conditions.

Possibilities of hazardous reactions: No data available.

Conditions to avoid: No data available.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: No data available.

11 Toxicological Information

Toxicity: LD₅₀ (Oral-Rat)(mg/kg): > 5,000 (Trypsin)

LD₅₀ (Oral-Rat)(mg/kg): 3,550 (Sodium chloride)

Inhalation: No data available (Trypsin)

LC₅₀ (Inhalation-Rat)(mg/m³): >42,000 - 1hr (Sodium chloride)

Dermal: no data available (Trypsin)

LD₅₀ (Dermal-Rabbit)(mg/kg): >10,000 (Sodium chloride)

No data available (Trypsin)

Carcinogenicity

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: No data available.

Symptoms associated with overexposure: Vomiting, diarrhea, dehydration, and congestion may occur in internal organs. Hypertonic salt solutions can produce inflammatory reactions in the gastrointestinal tract. (Sodium chloride)

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. (Trypsin)

Specific target organ toxicity - single exposure: No data available.

Specific target organ toxicity - repeated exposure: No data available.

Target Organs: No data available.

Medical conditions aggravated by exposure: No data available.

Routes of entry: Ingestion, inhalation, skin and eye contact.

NIOSH/RTECS: Not available

12 Ecological Information

Toxicity: LC₅₀ - Lepomis macrochirus (Bluegill) - 5,840 mg/l - 96 hrs (Sodium chloride)

EC₅₀ - Daphnia magna (Water flea) - 1,661 mg/l - 48 hrs (Sodium chloride)

NOEC - Daphnia - 1,500 mg/L - 7 d (Sodium chloride)

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Results of PBT and vPvB: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Other adverse effects: No data available.

13 Disposal Considerations

Disposal of Product: Dispose in accordance with all applicable federal, state and local environmental regulations.

Disposal of Packaging: Dispose of as unused product.

14 Transport Information

DOT (US)

Proper Shipping Name: CHEMICALS, N.O.S (NON-REGULATED)

UN/NA number: N/A Class: N/A Packaging group: N/A Hazard Label: N/A

Reportable Quantity (RQ): N/A

Poison Inhalation Hazard: N/A

IMDG

Proper Shipping Name: N/A

UN number: N/A Class: N/A Packaging group: N/A Hazard Label: N/A

IATA

Proper Shipping Name: N/A

UN Number: Class: N/A Packaging group: Hazard Label: N/A

15 Regulatory Information

TSCA: Not Listed

SARA Title III

Section 302 (EHS) Ingredients: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Section 313 Ingredients: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Section 304 (EHS/CERCLA) Ingredients: None.

Section 311/312 Hazard: No SARA Hazards.

16 Other Information

HMIS Rating

Health hazard: 2

Chronic health hazard: *

Flammability: 0

Physical hazard: 0

NFPA Rating

Health hazard: 2

Fire hazard: 0

Reactivity: 0

Special Hazard:

Further information: All chemicals may pose unknown hazards and should be used with caution. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Caisson Laboratories, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.

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