

MATERIAL SAFETY DATA SHEET

HEPARINASE I recombinant in sucrose 5%, 10 IU/mL RESEARCH GRADE

Revision 01 / Dec 2008

SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

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Product Name: Heparinase I, recombinant in sucrose 5%, 10 IU/mL, Research Grade
Part Numbers: 50-010
50-010-001

SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

CAS No.: 9025-39-2
EC No. 4.2.2.7

Systematic name: Heparin lyase
Synonyms: Heparin eliminase
Lyase, Heparin

Origin: Recombinant, non-pathogenic microorganism

Ingredients: Recombinant protein in sodium phosphate; sodium chloride; sucrose; water

Physical state: Aqueous solution; liquid or frozen

SECTION 3 - HAZARDS IDENTIFICATION

Emergency overview: Solution in water. Will not support burning. Not explosive.

Potential Health Effects:

Skin: May cause skin irritation

Eyes: May cause irritation or burning sensation

Inhalation: May cause irritation to the respiratory tract

Swallowed: Not known to cause toxic effects

Injection: Not known to cause toxicity with acute exposure, but may produce toxicity with repeated injections.

Carcinogenicity: Not determined

SECTION 4 - FIRST AID MEASURES

Skin contact: Flush with copious amounts of water.

Eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

Inhalation: Supply the victim with fresh air; consult doctor in case of complaints.

Swallowing: Rinse mouth with plenty of water.

On all of the above: Consult a doctor if symptoms develop.

SECTION 5 - FIRE FIGHTING MEASURES

Suitable extinguishing agents: Noncombustible.

Protective equipment: No special measures required. Prevent contact with skin and eyes.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Person-related safety precautions: Prevent contact with skin and eyes. Ventilate area.

Measures for environmental protection: No special measures required.

Measures for cleaning/collecting: Spilled material should be carefully wiped up and disposed as biomedical waste as per applicable waste disposal regulations. Wash spill site after material pickup is complete.

Additional information:

SECTION 7 - HANDLING AND STORAGE

Handling

Information for safe handling: Prevent contact with skin and eyes and prevent inhalation and swallowing. No other special precautions are necessary if used correctly.

Information about protection against explosions and fires: No special measures required.

Storage

Requirements to be met by storerooms and receptacles: No special requirements except that product should be stored frozen (preferably at -70 °C).

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None

Storage class: None assigned

Class according to regulation on flammable liquids: Void

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

General protective and hygienic measures: The usual precautionary measures for handling chemicals and potentially biohazardous materials should be followed. Use clothing sufficient to avoid skin contact. Safety shower and eye wash should be available in proximity.

Protection of hands: Use synthetic water resistant gloves.

Eye protection: Use safety glasses.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical form: Frozen, colorless, odorless aqueous solution.
(Heparinase I is a protein)

Melting point: 0 °C (melting point of aqueous solution)

Boiling point: Not applicable

Flash point: Not applicable

Flammability: Product is not flammable

Danger of explosion: Not determined

Solubility: Heparinase I and ingredients are water soluble

Organic solvents: 0 %

Solids content: 0 %

SECTION 10 - STABILITY AND REACTIVITY

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Dangerous reactions: No dangerous reactions known.

Dangerous products of decomposition: No dangerous decomposition products known.

SECTION 11 - TOXICOLOGICAL INFORMATION

Effects of Acute Exposure: Low acute toxicity expected following inhalation, ingestion, injection or skin exposure.

The potential eye irritation effects of Heparinase I are unknown and it should be considered to be potentially irritating to the eyes.

Effects of Chronic Exposure: Not determined for oral ingestion or skin exposure.

Development Toxicity: Not determined

Reproductive Toxicity: Not determined

Mutagenicity: Very low mutagenic potential. Negative in Ames *S. typhimurium*/*E. coli* tests, chromosomal aberration assays in CHO cells and, and following intravenous administration in mouse bone marrow micronucleated erythrocyte tests.

Carcinogenicity: Not determined

SECTION 12 - ECOLOGICAL INFORMATION

General notes: Not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

General notes: Dispose of in accordance with official regulations for biohazardous waste.

SECTION 14 - TRANSPORATION INFORMATION

D.O.T. shipping name: Heparinase I

This substance is considered to be non hazardous for transport.

SECTION 15 - REGULATIONS

Not available.

SECTION 16 - OTHER INFORMATION

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