

Material Safety Data Sheet

Date Printed: 05/05/2005 Date Updated: 04/09/2004 Version 1.20

Section 1 - Product and Company Information

Product Name Product Number Brand

Heparin, deaminated sodium salt from porcine intestinal mucosa

H7405

Sigma Chemical

Company Street Address City, State, Zip, Country Sigma-Aldrich 3050 Spruce Street

SAINT LOUIS, MO 63103 US 314 771 5765

Technical Phone: Fax:

800 325 5052

Emergency Phone:

414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

Substance Name CAS# **SARA 313** EC no Annex I Index Number DEAMINATED HEPARIN None

Formula Synonyms

Section 3 - Hazards Identification

Emergency Overview

Caution: Avoid contact and inhalation. Target organ(s): Blood.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Dermal Exposure

In case of contact, immediately wash skin with soap and copious amounts of water.

Eve Exposure

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Section 5 - Fire Fighting Measures

Autoignition Temp:

N/A

Extinguishing Media

Suitable

Noncombustible. Use extinguishing media appropriate to surrounding fire conditions.

Firefighting

Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)

Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Do not use if skin is cut or scratched. Wash thoroughly after handling.

Storage

Suitable

Keep tightly closed. Store in a cool dry place. Store at -20°C

Section 8 - Exposure Controls / PPE

Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment Respiratory

Government approved respirator.

Compatible chemical-resistant gloves.

Eve

Chemical safety goggles.

General Hygiene Measures

Wash thoroughly after handling. Wash contaminated clothing before reuse

Section 9 - Physical/Chemical Properties

N/A

Appearance

Physical State

Solid

Molecular Weight:

N/A **BP/BP** Range N/A MP/MP Range N/A Freezing Point N/A

Sigma Chemical - H7405

Page 2

Sigma-Aldrich Corporation www.sigma-aldrich.com

Vapor Pressure N/A Vapor Density N/A Saturated Vapor Conc. N/A SG/Density N/A **Bulk Density** N/A Odor Threshold N/A Volatile% N/A **VOC Content** N/A **Water Content** N/A Solvent Content N/A **Evaporation Rate** N/A Viscosity N/A **Partition Coefficient** N/A Decomposition Temp. N/A Flash Point °F N/A Flash Point °C N/A **Explosion Limits** N/A N/A Flammability **Autoignition Temp** N/A Solubility N/A

Section 10 - Stability and Reactivity

Stability

Stable

Stable.

N/A = not available

Hazardous Decomposition Products

Hazardous Decomposition Products

Carbon monoxide, Carbon dioxide, Nitrogen oxides, Sulfur oxides, Sodium/sodium oxides.

Hazardous Polymerization

Hazardous Polymerization

Will not occur.

Section 11 - Toxicological Information

Route of Exposure

Skin Contact

May cause skin irritation.

Eye Contact

May cause eye irritation.

Inhalation

Material may be irritating to mucous membranes and upper respiratory tract

Multiple Routes

May be harmful by inhalation, ingestion, or skin absorption.

Target Organ(s) or System(s)

Heparin and its salts act as anticoagulants subcutaneously or intravenously. Blood

Signs and Symptoms of Exposure

Heparin and its salts act as anticoagulants subcutaneously or intravenously.

Conditions Aggravated by Exposure

The toxicological properties have not been thoroughly investigated.

RTECS Number: N/A

Sigma Chemical - H7405

Page 3

Sigma-Aldrich Corporation www.sigma-aldrich.com

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

ΙΔΤΔ

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

US Classification and Label Text

US Statements

Caution: Avoid contact and inhalation. Target organ(s): Blood.

United States Regulatory Information

SARA Listed: No

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

required by the DSL: No NDSL: No

Section 16 - Other Information

Disclaimer

For R&D use only. Not for drug, household or other uses.

Warrant

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

Sigma Chemical - H7405

Page 4

Sigma-Aldrich Corporation www.sigma-aldrich.com