Material Safety Data Sheet

Section 1 - Product and Company Information

Product Name: HEPES, minimum 96.5% filtration
Product Number: H3375
Brand: Sigma Chemical
Company: Sigma-Aldrich
Street Address: 3050 Spruce Street
City, State, Zip, Country: SANT LOUIS, MO 63103 US
Technical Phone: 314 771 3765
Fax: 800 325 5052
Emergency Phone: 414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

Substance Name: HEPES FREE ACID
CAS #: 7985-45-9
SARA 313: No
EC No: 230-907-9
Annex 1 Index Number: C8H11N2O4S
Formula: C8H11N2O4S
Synonyms: Heps, 4-(2-hydroxyethyl)-1-piperazinethanesulfonic acid

Section 3 - Hazards Identification

HHSIS Rating
Health: 0
Flammability: 0
Reactivity: 0

NFPA Rating
Health: 0
Flammability: 0
Reactivity: 0

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 breathing becomes difficult, call a physician.

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

Eye Exposure
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. Call a physician.

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A
Extinguishing Media
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

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

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

Handling
User Exposure
Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage
Suitable: Keep tightly closed.

Section 8 - Exposure Controls / PPE

Engineering Controls
Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment
Respiratory
Wear dust mask.
Hand
Protective gloves.
Eye
Chemical safety goggles.

Section 9 - Physical/Chemical Properties

Appearance
Physical State: Solid
Color: Colorless
Form: Fire crystals

Molecular Weight: 238.51 AMU
pH: 5.0 - 6.5
BP/Boiling Range: N/A

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Section 10 - Stability and Reactivity

Stability
- Stable
- Do not mix with incompatible materials.
- Do not use strong oxidizing agents.

Conditions to Avoid
- Protect from moisture.
- Materials to Avoid
- Strong oxidizing agents.

Hazardous Decomposition Products
- Carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides.

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: May be harmful if inhaled. Material may irritate mucous membranes and upper respiratory tract.
- Ingestion: May be harmful if swallowed.

Signs and Symptoms of Exposure
- To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: TL6808000

Toxicity Data
- Oral: Quill = 316 mg/kg (LD50)

Section 12 - Ecological Information
- No data available.

Section 13 - Disposal Considerations
- Appropriate Method of Disposal of Substance or Preparation
- Contact a licensed professional waste disposal service to dispose of this material.
- 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.

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

Section 15 - Regulatory Information
- United States Regulatory Information
- SARA Listed: No
- TSCA Inventory Item: Yes

- Canada Regulatory Information
  - WDM 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.
    - DSL: Yes
    - NDSL: No

Section 16 - Other Information

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

Warranty
- 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 this 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.