

Material Safety Data Sheet

HEPES Buffered Saline (HBS)

Catalog Number: 0409



Athena Enzyme Systems™

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1 - Product and Company Information

Product Name: HEPES Buffered Saline (HBS)
Catalog Number: 0409
Product Description: A solution containing salts, carbohydrates, and buffering agents.
Manufacturer/Supplier: Athena Environmental Sciences, Inc.
Information Department: Technical Services
Emergency Phone: 410-455-6319

2 - Composition / Data on Components

CAS No. Description: Not Applicable

3 - Hazard Identification

Hazard Description:

This product contains no hazardous constituents, or the concentration of all chemical constituents are below the regulatory threshold limits described by Occupational Safety Health Administration Hazard Communication Standard 29 CFR 1910.1200 and the European Directive 91/155/EEC, and 93/112/EC.

NFPA Ratings (Scale: 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

4 - First Aid Measures

General Information: No special measures required.

After inhalation:

Seek medical treatment in case of complaints.

After skin contact:

Immediately wash with water and soap and rinse thoroughly

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

If symptoms persist consult doctor.

Information for doctor: Show this label.

5 - Fire Fighting Measures

Suitable extinguishing agents:

CO₂ extinguishing powder or water spray. Fight larger fires with water or alcohol resistant foam.

Protective equipment:

No special measures required.

6 - Accidental Release Measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Measures for environmental protection:

Wipe up with damp sponge or mop.

Measures for cleaning/collecting:

No special measures required.

Additional information:

No dangerous substances are released.

7 - Handling and Storage

Handling:

Information for safe handling:

No special measures required.

Information about protection against explosions and fires:

No special measures required.

Storage:

Requirements to be met by storerooms and receptacles:

Store in standard refrigeration or freezer unit.

Information about storage in one common storage facility:

No special requirements.

Further information about storage conditions: None.

8 - Exposure Controls and Personal Protection

Additional information about the design of technical systems:

No further data; see item 7.

Components with limit values that require monitoring at the workplace:

Not required.

Additional information:

The lists that were valid during the creation were used as basis.

Personal Protective Equipment:

General protective and hygienic measures:

The usual precautionary measures to avoid eye contact should be followed.

Breathing equipment:

Not applicable

Protection of hands:

Rubber or latex gloves.

Eye protection:

Safety goggles.

Body protection:

Protective work clothing (lab coat).

9 - Physical and Chemical Properties

Form: Clear liquid

Color: Clear

Odor: Characteristic

Change in condition:

Melting point/ Melting range: Not applicable.

Boiling point/ Boiling range: Not determined.

Flash point: Not applicable

Flammability (solid, gaseous): Product is not flammable.

Danger of explosion: Product does not present an explosion hazard.

Density: Not determined

Solubility in /Miscibility with: Not applicable

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.

11 - Toxicological Information

Acute toxicity:

The toxicological properties have not been thoroughly investigated.

RTECS# PD0457000: Methionine, L-

Toxicity Data:

ORL-Rat LD50: 36 mg/Kg

IPR-Rat LD50: 4328 mg/Kg

IPR-Mus LD50: >9500 mg/Kg

Only Selected Registry of Toxic Effects of Chemical Substances (RTECS) Data are Presented here. See Actual Entry in RTECS for Complete Information.

12 - Ecological Information

Ecological effects:

Other information:

The ecological effects have not been thoroughly investigated, but currently none have been identified.

General Notes:

Generally not hazardous for water.

13 - Disposal Considerations

Product:

Recommendation:

Must adhere to state and federal regulations. Small quantities can be disposed of with solid waste. Disposal must be made according to regulations found in 40.CFR.261. This product is not considered a RCRA hazardous waste.

Uncleaned packagings:

Recommendation:

Disposal must be made according to state and federal regulations.

Recommended cleansing agent:

Water, if necessary with cleansing agents.

14 - Transportation Information

DOT regulations:

Hazard Class:

Land transport ADR/RID (cross-border):

ADR/RID Class:

Maritime transport IMDG:

IMDG Class:

Marine pollutant: No

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class:

15 - Regulatory Information

Reviews, Standards and Regulations:

EPA TSCA Test Submission (TSCATS) Database, January 1997- This product is solely for research and development purposes only and may not be used, processed or distributed for a commercial purpose. It may only be handled by technically qualified individuals.

No Prop 65 Chemicals.

16 - Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither Athena Environmental Sciences, Inc. nor any of its subsidiaries assumes any liabilities 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.

Department Issuing MSDS: Office of the CSO

Contact: Technical Service Representative