Bioland Scientific LLC

Material Safety Data Sheet

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name **HEPES**

Catalog Number CH01
Brand Bioland Chemicals

Company Bioland Scientific LLC
14925 Paramount Blvd., Suite C
Paramount, CA 90723
USA

Telephone 1-562-377-2668
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: 4-(2-Hydroxyethyl)piperazine-1-ethanesulfonic acid
Formula: C8H18N2O4S
Molecular Weight : 238.30 g/mol

CAS-No.	EC-No.	Index-No.	%
7365-45-9			>99.5%

3. HAZARDS IDENTIFICATION

Emergency Overview
OSHA Hazards: No known OSHA hazards

HMIS Classification
Health Hazard: 0
Flammability: 0
Physical hazards: 0

NFPA Rating
Health Hazard: 0
Fire : 0
Reactivity Hazard: 0

Potential Health Effects
Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: This material may cause eye irritation.
Ingestion: May be harmful if swallowed.

4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled
Move person to fresh air immediately. If not breathing give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water for at least 15 minutes while removing contaminated clothing.

In case of eye contact
Flush eyes with plenty of water for at least 15 minutes.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions. -Carbon oxides, nitrogen oxides (NOx), sulphur oxides

6. ACCIDENTAL RELEASE MEASURES

Avoid dust formation. Avoid breathing vapors, mist or gas.

Environmental precautions
Do not let product enter drains.

Methods and materials for containment and cleaning up
Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures
General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form: crystalline
Color: colorless

Safety data

pH: 5.0 - 6.5 at 238 g/l at 25 °C (77 °F)
Melting point: 234 °C (453 °F)
Boiling point: no data available
Flash point: no data available
Ignition temperature: no data available
Lower explosion limit: no data available
Upper explosion limit: no data available
Water solubility: soluble

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: no data available.
Materials to avoid: strong oxidizing agents
Hazardous Decomposition Products: Nitrogen oxides, carbon oxides, sulphur oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

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

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

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

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

Reproductive toxicity: no data available

Specific target organ toxicity -single exposure (GHS): no data available

Specific target organ toxicity -repeated exposure (GHS): no data available

Aspiration hazard: no data available

Potential Health Effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.
Skin May be harmful if absorbed through skin. Causes skin irritation.
Eyes May causes eye irritation.
Ingestion May be harmful if swallowed.

12. ECOLOGICAL INFORMATION

Elimination information: no data available

Ecotoxicity effects: no data available

Further information on ecology: no data available

13. DISPOSAL CONSIDERATIONS

Product: Dispose of in a manner consistent with federal, state, and local regulations.

Contaminated packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US): Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

15. REGULATORY INFORMATION

No known OSHA Hazards

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

SARA 313 Components
SARA 313: 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.

SARA 311/312 Hazards No SARA Hazards

Massachusetts Right To Know Components No Components Listed

Pennsylvania Right To Know Components
4-(2-Hydroxyethyl)piperazin-1-ylethanesulphonic acid; CAS-No. 7365-45-9

New Jersey Right To Know Components
4-(2-Hydroxyethyl)piperazin-1-ylethanesulphonic acid; CAS-No. 7365-45-9

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

16. Other information

Bioland Scientific LLC provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. BIOLAND SCIENTIFIC LLC MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, BIOLAND SCIENTIFIC LLC WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.