



MATERIAL SAFETY DATA SHEET
REQUIRED UNDER SAFETY AND HEALTH REGULATION FOR SHIP REPAIRING

DATE UPDATED: NOVEMBER 02, 2015

SECTION 1. ----- CHEMICAL IDENTIFICATION -----

Product Name HEPBS
Product Code(s) HB0495
Recommended Use For Laboratory Use Only
Not for Human or Animal Drug Use
Synonyms N-(2-Hydroxyethyl)piperazine-N'-(4-butanesulfonic acid)

SECTION 2. ----- HAZARDS IDENTIFICATION -----

GHS - Classification

Classification Skin Irritant 2 Eye Irritant 2A Specific target organ toxicity - single exposure 3
Signal Word Warning



Hazard Statements H315 - Causes skin irritation H319 - Causes serious eye irritation H335-
May cause respiratory irritation

Precautionary Statements P261 - Avoid breathing dust/fume/gas/mist/vapors/spray P264 - Wash skin thoroughly after handling P271-Use only outdoors or in a well-ventilated area P280-Wear protective gloves/ eye protection/ face protection P302+P350-IF ON SKIN: Wash with plenty of soap and water P304+P340-IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes Remove contact lenses, if present and easy to do. Continue rinsing P312-Call a POISON CENTER or doctor/ physician if you feel unwell P321-Specific treatment (see supplemental first aid instructions on this label) P332+P313-If skin irritation occurs: Get medical advice/ attention P337+P313-If eye irritation persists: Get medical advice/ attention P362+Take off contaminated clothing and wash before Reuse P403+P233-Store in a well-ventilated place. Keep container tightly closed P405-Store locked up P501-Dispose of contents/ container to an approved waste disposal plant

SECTION 3. ----- COMPOSITION/INFORMATION ON INGREDIENTS -----

Chemical Name	EC No.	REACH Reg. No.	CAS-No	Weight %	Classification
HEPBS	-	Not available	161308-36-7	95-100	-

SECTION 4. ----- FIRST-AID MEASURES-----

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin Contact	Wash off with soap and plenty of water.
Inhalation	move person into fresh air. If not breathing, give artificial respiration.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water.
Notes to Physician	Treat symptomatically

SECTION 5. ----- FIRE FIGHTING MEASURES -----

Flammable Properties	Not flammable
Flash Point	Not determined
Suitable Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Hazardous Combustion Products	
Explosion Data	
Sensitivity to Mechanical Impact	Not sensitive
Sensitivity to Static Discharge	Not sensitive

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

SECTION 6. ----- ACCIDENTAL RELEASE MEASURES-----

Personal Precautions	Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
Methods for Containment	Prevent further leakage or spillage if safe to do so
Methods for Cleaning Up	Pick up and transfer to properly labeled containers
Environmental precautions	Do not let product enter drains

SECTION 7. ----- HANDLING AND STORAGE-----

Handling	Handle in accordance with good industrial hygiene and safety practice. Protect from light.
Storage	Keep container tightly closed in a dry and well-ventilated place. Protect from light.

SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION-----**Personal protective equipment****Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved Under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Specific engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----

Appearance	White	
Odor	No information available	
Odor Threshold	No information available	
Decomposition Temperature °C	No information available	
Freezing Point	No information available	
Initial Boiling Point	No information available	
Physical State	Crystalline Powder	
pH	No data available	
Flash Point	Not determined	
Autoignition Temperature	No data available	
Boiling Point/Range	No data available	
Melting Point/Range	No data available	
Flammability Limits in Air	Upper No data available	Lower No data available
Explosive Properties	No information available	
Oxidizing Properties	No information available	
Evaporation Rate	No data available	
MMHG @ 37.8 C	No data available	
Vapor Density	No data available	
Specific Gravity	No data available	
Solubility	No information available	
Partition Coefficient (n-octanol/water)	No data available	
Viscosity	No information available	

SECTION 10. ----- STABILITY AND REACTIVITY -----

Stability	Stable under recommended storage conditions
Incompatible Products	no data available
Conditions to Avoid	no data available.

Hazardous Decomposition Products Carbon oxides, nitrogen oxides (NOx), Sulphur oxides

Hazardous Polymerization Hazardous polymerization does not occur

SECTION 11. ----- TOXICOLOGICAL INFORMATION -----

Acute toxicity

Oral LD50

no data available

Inhalation LC50

Dermal LD50

no data available

Other information on acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

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

Reproductive toxicity

no data available

Teratogenicity

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation.

Signs and Symptoms of Exposure

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

Synergistic effects

no data available

Additional Information

RTECS: Not available

SECTION 12. ----- ECOLOGICAL INFORMATION -----

Ecotoxicity

The environmental impact of this product has not been fully investigated.

SECTION 13. ----- DISPOSAL CONSIDERATIONS -----

Waste Disposal Method Dispose of material in accordance with all federal, state, and local regulations

Contaminated Packaging Dispose of in accordance with all federal, state and local regulations

SECTION 14. ----- TRANSPORT INFORMATION -----

IATA Not regulated

DOT Not regulated

SECTION 15. ----- REGULATORY INFORMATION -----

WHMIS Classification

D2B	Toxic Material Causing Other Toxic Effects	Moderate skin irritant Moderate respiratory irritant Moderate eye irritant
-----	--	--

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

SECTION 16. ----- OTHER INFORMATION-----

Issuing Date	13-Aug-2009
Revision Date	02-Nov-2015
Revision Note	No information available.
Recommended Restrictions	No information available

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS