

# Hemin stock solution, 500x

## 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY

Product Name: Hemin stock solution, 500x  
Catalog Number: ML-108  
Supplier: Jena Bioscience GmbH  
Loebstedter Strasse 71  
07749 Jena, Germany  
Telephone: +49 - 3641 - 62 85 000  
Fax: +49 - 3641 - 62 85 100  
E-Mail: info@jenabioscience.com  
Www: <http://www.jenabioscience.com>

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008  
This substance is not classified as dangerous according to Directive 67/548/EEC.

### Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

**Other hazards** - none

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

### Mixtures / Hazardous components:

#### Hemin (porcine):

Substance Name: Hemin (porcine)  
Synonyme: Ferriprotoporphyrin IX chloride; Chloro(protoporphyrinato)iron(III);  
Chlorohemin; Hemin(chloride); Chloroprotoporphyrin IX iron(III)  
Molecular Formula:  $C_{34}H_{32}ClFeN_4O_4$   
Molecular Weight: 651.94  
CAS Number: 16009-13-5  
EC-No.: 240-140-1  
Concentration: 0.25 %  
Classification: -

#### Triethanolamine:

Substance Name: Triethanolamine  
Synonyme: 2,2 ,2 -Nitrilotriethanol; Tris(2-hydroxyethyl)amine  
Molecular Formula:  $C_6H_{15}NO_3$

# Hemin stock solution, 500x

Molecular Weight:	149.19
CAS Number:	102-71-6
EC-No.:	203-049-8
Concentration:	50 %
Classification:	-

## 4. FIRST AID MEASURES

**After skin contact:** Immediately wash skin with soap and plenty of water.

**After swallowing:** Never give anything by mouth to an unconscious person. Rinse mouth with water provided person is conscious.

**After inhalation:** Remove to fresh air. If not breathing give artificial respiration.

**After eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes.

## 5. FIRE-FIGHTING MEASURES

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

**Specific hazards arising from the chemical:** Carbon oxides, nitrogen oxides (NO<sub>x</sub>), Hydrogen chloride gas, Iron oxides.

**Special Firefighting Procedures:** Wear self-contained breathing apparatus for firefighting if necessary.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Wear protective equipment. Keep unprotected persons away.

**Environmental precautions:** Do not let product enter drains.

**Method for Cleaning Up:** Keep in suitable, closed containers for disposal. Dispose contaminated material as waste according to section 13.

## 7. HANDLING AND STORAGE

**Handling:** Avoid formation of aerosols and contact with eyes, skin and clothing.

**User Exposure:** Avoid inhalation. Use personal protective equipment (i.e. impermeable gloves, lab coat or appr.).

**Storage:** Keep tightly closed. Store in a dry place at 4°C, protect from light.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Measures:** Ensure adequate ventilation and cleanable resistant tightly sealed working surfaces.

**Respiratory protection:** In case of insufficient ventilation wear suitable respiratory equipment.

**Hand protection:** Handle with gloves to prevent skin contact.

**Eye protection:** Wear chemical safety goggles to prevent eye contact.

# Hemin stock solution, 500x

**Skin and body protection:** Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**General Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance:

Form: liquid  
Color: dark aubergine

### Safety data:

pH: basic (10.3 +/- 0.2)  
Melting point: No data available  
Boiling point: No data available  
Flash point: No data available  
Ignition temperature: No data available  
Thermal decomposition: No data available  
Self-igniting: Product is not self-igniting.  
Danger of explosion: Product does not present an explosion hazard.  
Vapor pressure: No data available  
Solubility in / Miscibility with water: No data available  
Segregation coefficient  
(n-octanol / water): No data available  
Decomposition temperature: >100°C  
Viscosity, dynamic: No data available

## 10. STABILITY AND REACTIVITY

**Reactivity:** No data available

**Chemical stability:** Stable under recommended storage conditions at 4°C for 12 months in the dark.

**Possibility of hazardous reactions:** No data available

**Conditions to avoid:** Heat, Light, strong oxidizing agents, strong acids.

**Incompatible materials:** No data available

**Hazardous decomposition products:** Thermal decomposition can lead to release of irritating gases and vapors such as carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** LD50 oral: 30 g/kg rat  
LC50 inhalation: No data available

# Hemin stock solution, 500x

	LD50 dermal: No data available LD50 intravenous: No data available LD50 subcutaneous: No data available Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.
<b>Signs / Symptoms of exposure:</b>	Local effects: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Specific effects: May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache.
<b>Skin corrosion/irritation:</b>	No data available
<b>Serious eye damage/irritation:</b>	No data available
<b>Respiratory or skin sensitization:</b>	No data available
<b>Germ cell mutagenicity:</b>	No data available
<b>Carcinogenicity:</b>	No data available
<b>Reproductive toxicity:</b>	No data available
<b>Additional information:</b>	RTECS: No data available (Hemin) RTECS: KL9275000 (Triethanolamine)

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	No data available
<b>Persistence and degradability:</b>	Biodegradability (Triethanolamine)
<b>Bioaccumulative potential:</b>	No data available
<b>Mobility in soil:</b>	No data available
<b>General notes:</b>	May cause long-term adverse effects in the aquatic environment. Do not flush into surface water or sanitary sewer system.
<b>Results of PBT and vPvB assessment:</b>	
PBT:	No data available
vPvB:	No data available

## 13. DISPOSAL CONSIDERATIONS

**Product:** Observe all federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Must not be disposed of together with household garbage.

**Contaminated Packaging:** Dispose of as unused product.

## 14. TRANSPORT INFORMATION

<b>ADR / RID:</b>	Not dangerous goods
<b>DOT (US):</b>	Not dangerous goods
<b>IMDG:</b>	Not dangerous goods

# Hemin stock solution, 500x

**ICAO / IATA:** Not dangerous goods  
**UN "Model Regulation":** Not dangerous goods

## 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### 15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture:

No data available

**15.2 Chemical Safety Assessment:** No data available

## 16. OTHER INFORMATION

This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Users should make independent decisions regarding completeness of the information based on all sources available.

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.

Jena Bioscience GmbH shall not be held liable for any damage resulting from handling or from contact with the above product. See our website for our terms and conditions of sales.