

Personal Protection	H
Reactivity	0
Fire	1
Health	3

# Material Safety Data Sheet Hexanediamine, 70% MSDS

Section 1: Chemical Product and Company Identification		
Product Name: Hexanediamine, 70%	Contact Information:	
Catalog Codes: SLH1558	<b>Sciencelab.com, Inc.</b> 14025 Smith Rd.	
CAS#: Mixture.	Houston, Texas 77396	
RTECS: Not applicable.	US Sales: 1-800-901-7247	
TSCA: TSCA 8(b) inventory: 1,6-hexanediamine; Water	International Sales: 1-281-441-4400 Order Online: ScienceLab.com	
CI#: Not available.		
Synonym:	CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300	
Chemical Name: Not applicable.	International CHEMTREC, call: 1-703-527-3887	
Chemical Formula: Not applicable.	For non-emergency assistance, call: 1-281-441-4400	

# Section 2: Composition and Information on Ingredients

#### **Composition:**

Name	CAS #	% by Weight
{1,6-}hexanediamine	124-09-4	70
Water	7732-18-5	30

**Toxicological Data on Ingredients:** 1,6-hexanediamine: ORAL (LD50): Acute: 750 mg/kg [Rat]. DERMAL (LD50): Acute: 1110 mg/kg [Rabbit].

# **Section 3: Hazards Identification**

### Potential Acute Health Effects:

Extremely hazardous in case of skin contact (irritant), of eye contact (irritant). Very hazardous in case of skin contact (corrosive). Hazardous in case of inhalation. Non-hazardous in case of ingestion. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

### **Potential Chronic Health Effects:**

Extremely hazardous in case of skin contact (irritant), of eye contact (irritant). Very hazardous in case of skin contact (corrosive). Hazardous in case of skin contact (sensitizer), of inhalation. Non-permeator by skin. Non-hazardous in case of ingestion. CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS:

Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to blood, kidneys, lungs, liver. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated or prolonged inhalation of vapors may lead to chronic respiratory irritation.

# **Section 4: First Aid Measures**

### Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

### Skin Contact:

If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical got on the victim's exposed skin, such as the hands : Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

### Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

### **Serious Inhalation:**

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

### Ingestion:

Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

# Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...).

Fire Hazards in Presence of Various Substances: Not available.

### **Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

### Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

# Section 6: Accidental Release Measures

### Small Spill:

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

#### Large Spill:

Corrosive liquid. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

### Section 7: Handling and Storage

#### **Precautions:**

Keep container dry. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapour/ spray. Never add water to this product In case of insufficient ventilation, wear suitable respiratory equipment If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes

#### Storage:

Keep container dry. Keep in a cool place. Ground all equipment containing material. Corrosive materials should be stored in a separate safety storage cabinet or room.

# **Section 8: Exposure Controls/Personal Protection**

#### **Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

#### **Personal Protection:**

Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

#### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

### **Section 9: Physical and Chemical Properties**

Physical state and appearance: Liquid.

Odor: Not available.

Taste: Not available.

Molecular Weight: Not applicable.

Color: Not available.

pH (1% soln/water): Neutral.

Boiling Point: The lowest known value is 100°C (212°F) (Water).

Melting Point: Not available.

Critical Temperature: Not available.

Specific Gravity: Weighted average: 0.89 (Water = 1)

Vapor Pressure: The highest known value is 17.535 mm of Hg (@ 20°C) (Water).
Vapor Density: The highest known value is 0.62 (Air = 1) (Water).
Volatility: 100% (v/v). (1,6-hexanediamine.)
Odor Threshold: Not available.
Water/Oil Dist. Coeff.: Not available.
Ionicity (in Water): Not available.
Dispersion Properties: See solubility in water.
Solubility: Easily soluble in cold water.

# Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Not available.

**Corrosivity:** Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Not available.

# **Section 11: Toxicological Information**

Routes of Entry: Eye contact. Inhalation.

#### **Toxicity to Animals:**

Acute oral toxicity (LD50): 1071 mg/kg (Rat) (Calculated value for the mixture). Acute dermal toxicity (LD50): 1586 mg/kg (Rabbit) (Calculated value for the mixture).

Chronic Effects on Humans: The substance is toxic to blood, kidneys, lungs, liver.

### Other Toxic Effects on Humans:

Extremely hazardous in case of skin contact (irritant). Very hazardous in case of skin contact (corrosive). Hazardous in case of inhalation. Non-hazardous in case of ingestion.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

# Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

#### Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

# Section 13: Disposal Considerations

Waste Disposal:

# **Section 14: Transport Information**

**DOT Classification:** CLASS 8: Corrosive liquid.

Identification: : Corrosive liquids n.o.s. (1,6-hexanediamine) : UN1760 PG: III

Special Provisions for Transport: Not available.

### **Section 15: Other Regulatory Information**

#### Federal and State Regulations:

Massachusetts RTK: 1,6-hexanediamine TSCA 8(b) inventory: 1,6-hexanediamine; Water

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications:** 

WHMIS (Canada): CLASS D-2A: Material causing other toxic effects (VERY TOXIC). CLASS E: Corrosive liquid.

DSCL (EEC):

R21/22- Harmful in contact with skin and if swallowed. R34- Causes burns. R43- May cause sensitization by skin contact.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 1

Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 1

Reactivity: 0

Specific hazard:

### **Protective Equipment:**

Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

# **Section 16: Other Information**

References: Not available.

Other Special Considerations: Not available.

Created: 10/09/2005 05:43 PM

### Last Updated: 11/01/2010 12:00 PM

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