

# OXFORD LAB FINE CHEM LLP

ISO 9001-2008 Certified Company

**Regd Office:** Unit no 12, 1st Floor,  
Neminath Industrial Estate No.6,  
Navghar, Vasai (East), Palghar - 410210.  
Maharashtra, INDIA.

**Tel:** +91 250 2390032 / 2390989 / 2390990  
**Email:** sales@oxfordlabchem.com /  
info@oxfordlabchem.com  
**Web:** www.oxfordlabchem.com



## MATERIAL SAFETY DATA SHEET

### **GUANIDINE HYDROCHLORIDE 99%**

**(For Synthesis)**  
**(Guanidinium Chloride)**  
**MSDS CAS: 50-01-1**

### **Section 1: Chemical Product and Company Identification**

#### Section 1: Chemical Product

**Product Name:** GUANIDINE HYDROCHLORIDE

**CAS#:** 50-01-1

**Synonym:** Guanidinium Chloride

**Chemical Name:** Guanidine Hydrochloride

**Chemical Formula:** CH<sub>5</sub>N<sub>3</sub>.HCl

**Brand:** OXFORD

#### Details Of The Supplier Of The Safety Data Sheet :

##### Company identification:

**OXFORD LAB FINE CHEM LLP**

Unit. No. 12, 1st Floor, Neminath Industrial Estate No. 6,  
Navghar, Vasai (East). Palghar - 401 210.  
Mumbai, Maharashtra, INDIA.

**Tel:** 91-250-2390989

**Tel/Fax:** 91-250-2390032

### **Section 2: Composition and Information on Ingredients**

#### Composition:

Name	CAS #	% by Weight
Guanidine Hydrochloride	50-01-1	100

**Toxicological Data on Ingredients:** Guanidine hydrochloride: ORAL (LD50): Acute: 475 mg/kg [Rat].

## Section 3: Hazards Identification

### **Potential Acute Health Effects:**

Extremely hazardous in case of ingestion. Very hazardous in case of skin contact (irritant), of eye contact (irritant). 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 ingestion. Very hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. **CARCINOGENIC EFFECTS:** Not available. **MUTAGENIC EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance is toxic to the nervous system. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged inhalation of dust 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:**

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. 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:** Not available.

### **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, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...).

**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:**

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:**

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

# OXFORD LAB FINE CHEM LLP

ISO 9001-2008 Certified Company

**Regd Office:** Unit no 12, 1st Floor,  
Neminath Industrial Estate No.6,  
Navghar, Vasai (East), Palghar - 410210.  
Maharashtra, INDIA.

**Tel:** +91 250 2390032 / 2390989 / 2390990  
**Email:** sales@oxfordlabchem.com /  
info@oxfordlabchem.com  
**Web:** www.oxfordlabchem.com



## Section 7: Handling and Storage

### Precautions:

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 dust. 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. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

## Section 8: Exposure Controls/Personal Protection

### Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### Personal Protection:

Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

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

Splash goggles. Full suit. Dust 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:** Solid. (Solid crystalline powder.)

<b>Odor</b>	: Not available.
<b>Taste</b>	: Not available.
<b>Molecular Weight</b>	: 95.53 g/mole
<b>Color</b>	: White.
<b>pH (1% soln/water)</b>	: 6 [Acidic.]

# OXFORD LAB FINE CHEM LLP

ISO 9001-2008 Certified Company

**Regd Office:** Unit no 12, 1st Floor,  
Neminath Industrial Estate No.6,  
Navghar, Vasai (East), Palghar - 410210.  
Maharashtra, INDIA.

**Tel:** +91 250 2390032 / 2390989 / 2390990  
**Email:** sales@oxfordlabchem.com /  
info@oxfordlabchem.com  
**Web:** www.oxfordlabchem.com

**Oxford**  
Range of  
Laboratory Chemicals

## Section 9: Physical and Chemical Properties (Continued)

<b>Boiling Point</b>	: Not available.
<b>Melting Point</b>	: Decomposes.
<b>Critical Temperature</b>	: Not available.
<b>Specific Gravity</b>	: 1.4 (Water = 1)
<b>Vapor Pressure</b>	: Not applicable.
<b>Vapor Density</b>	: Not available.
<b>Volatility</b>	: Not available.
<b>Odor Threshold</b>	: Not available.
<b>Water/Oil Dist. Coeff.</b>	: Not available.
<b>Ionicity (in Water)</b>	: Not available.
<b>Dispersion Properties</b>	: See solubility in water, methanol.
<b>Solubility</b>	: Easily soluble in methanol. 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:** No.

## Section 11: Toxicological Information

**Routes of Entry:** Eye contact. Ingestion.

## Section 11: Toxicological Information (Continued)

**Toxicity to Animals:** Acute oral toxicity (LD50): 475 mg/kg [Mouse].

**Chronic Effects on Humans:** The substance is toxic to the nervous system.

**Other Toxic Effects on Humans:**

Extremely hazardous in case of ingestion. Very hazardous in case of skin contact (irritant).

**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 more toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Considerations

**Waste Disposal:**

# OXFORD LAB FINE CHEM LLP

ISO 9001-2008 Certified Company

**Regd Office:** Unit no 12, 1st Floor,  
Neminath Industrial Estate No.6,  
Navghar, Vasai (East), Palghar - 410210.  
Maharashtra, INDIA.

**Tel:** +91 250 2390032 / 2390989 / 2390990  
**Email:** sales@oxfordlabchem.com /  
info@oxfordlabchem.com  
**Web:** www.oxfordlabchem.com



## Section 14: Transport Information

### Land transport (ADR-RID)

**General information:** Not regulated.

### Sea transport (IMDG) [English only]

**General information:** Not regulated.

### Air transport (ICAO-IATA) [English only]

**General information:** Not regulated.

## Section 15: Other Regulatory Information

### Federal and State Regulations: TSCA 8(b) inventory: Guanidine hydrochloride

### Other Regulations:

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

### Other Classifications:

**WHMIS (Canada):** CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2B: Material causing other toxic effects (TOXIC).

**DSCL (EEC):** R22- Harmful if swallowed. R38- Irritating to skin. R41- Risk of serious damage to eyes.

### HMIS (U.S.A.):

**Health Hazard:** 2

**Fire Hazard:** 1

**Reactivity:** 0

**Personal Protection:** E

# OXFORD LAB FINE CHEM LLP

ISO 9001-2008 Certified Company

**Regd Office:** Unit no 12, 1st Floor,  
Neminath Industrial Estate No.6,  
Navghar, Vasai (East), Palghar - 410210.  
Maharashtra, INDIA.

**Tel:** +91 250 2390032 / 2390989 / 2390990  
**Email:** sales@oxfordlabchem.com /  
info@oxfordlabchem.com  
**Web:** www.oxfordlabchem.com

**Oxford**  
Range of  
Laboratory Chemicals

## Section 15: Other Regulatory Information (Continued)

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

**Health:** 2

**Flammability:** 1

**Reactivity:** 0

**Specific hazard:**

### Protective Equipment:

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

## Section 16 - Additional Information

**References:** Not available.

**Other Special Considerations:** Not available.

### ***Disclaimer:***

\*\*\*\*\*  
The information contained herein in good faith but makes no representations 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.

Oxford Lab Fine Chem LLP 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, Oxford Lab Fine Chem LLP will not be responsible for damages resulting from use of or reliance upon this information.