

# 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.  
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**Tel:** +91 250 2390032 / 2390989 / 2390990  
**Email:** sales@oxfordlabchem.com /  
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## MATERIAL SAFETY DATA SHEET

### DIMETHYL GLYOXIME 98%

Extra Pure

(2,3-Butanedion Dioxime)

MSDS CAS: 95-45-4

## Section 1: Chemical Product and Company Identification

### Section 1: Chemical Product

**Product Name:** DIMETHYL GLYOXIME

**CAS#:** 95-45-4

**Synonym:** 2,3-Butanedionedioxime; Biacetyl dioxime;  
Diacetyldioxime; 2,3-Diisonitrosobutane

**Chemical Name:** Dimethyl Glyoxime

**Chemical Formula:** C<sub>4</sub>H<sub>8</sub>N<sub>2</sub>O<sub>2</sub>

**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
Dimethyl Glyoxime	95-45-4	100

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## Section 3: Hazards Identification

**Toxicological Data on Ingredients:** Dimethylglyoxime LD50: Not available. LC50: Not available.

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

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation.

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

**CARCINOGENIC EFFECTS:** Not available. **MUTAGENIC EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

## Section 4: First Aid Measures

### **Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

### **Skin Contact:**

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

**Serious Skin Contact:** Not Available.

### **Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation:** Not Available.

### **Ingestion:**

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

**Serious Ingestion:** Not available.

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## 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:** Slightly flammable to flammable in presence of heat.

**Explosion Hazards in Presence of Various Substances:**  
Slightly explosive in presence of open flames and sparks. Non-explosive in presence of shocks.

**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:**

As with most organic solids, fire is possible at elevated temperatures.

**Special Remarks on Explosion Hazards:**

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

## 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.

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## Section 7: Handling and Storage

### Precautions:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, reducing agents, acids.

### Storage:

Keep container tightly closed. Keep container in a cool, well-ventilated area.

## 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. (Crystalline solid.)

**Odor** : Odorless.

**Taste** : Not available.

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

<b>Molecular Weight</b>	: 116.12 g/mole
<b>Color</b>	: White. Off-white.
<b>pH (1% soln/water)</b>	: Not applicable.
<b>Boiling Point</b>	: Not available.
<b>Melting Point</b>	: 239°C (462.2°F)
<b>Critical Temperature</b>	: Not available.
<b>Specific Gravity</b>	: Not available.
<b>Vapor Pressure</b>	: Not available.
<b>Vapor Density</b>	: Not available.
<b>Volatility</b>	: 0% (v/v).
<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, diethyl ether, and acetone.
<b>Solubility</b>	: Soluble in methanol, diethyl ether, and acetone. Insoluble in cold water.

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Excess heat.

**Incompatibility with various substances:** Reactive with oxidizing agents, reducing agents, acids.

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

**Special Remarks on Reactivity:** Not available.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

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## Section 11: Toxicological Information

**Routes of Entry:** Inhalation. Ingestion.

**Toxicity to Animals:** LD50: Not available. LC50: Not available.

**Chronic Effects on Humans:** Not Available.

**Other Toxic Effects on Humans:**

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation.

**Special Remarks on Toxicity to Animals:**

Lowest Published Lethal Dose: LDL [Rat] - Route: Oral; Dose: 250 mg/kg

**Special Remarks on Chronic Effects on Humans:** May affect genetic material (mutagenic).

**Special Remarks on other Toxic Effects on Humans:**

Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract and mucous membrane irritation. Ingestion: May be harmful if swallowed. May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.

## 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.

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

## Section 13: Disposal Considerations

### Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## Section 14: Transport Information

### Land transport (ADR-RID)

**Proper shipping name:** FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S.

**UN N°:** 2926

**H.I. nr:** 46

**ADR - Class:** 4.1

**Labelling - Transport:** 4.1 : Flammable solids, self-reactive substances and desensitized explosives. 6.1 : Toxic substances.

**ADR - Group:** III

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

**Proper shipping name:** FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S.

**UN N°:** 2926

**IMO-IMDG - Class or division:** 4.1 : Flammable solids, self-reactive substances and desensitized explosives. (6.1: Toxic substances)

**IMO-IMDG - Packing group:** III

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

**Proper shipping name:** FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S.

**UN N°:** 2926

**IATA - Class or division:** 4.1 : Flammable solids, self-reactive substances and desensitized explosives. (6.1: Toxic substances.)

**IATA - Packing group:** III

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## Section 15: Other Regulatory Information

**Federal and State Regulations:** TSCA 8(b) inventory: Dimethyl Glyoxime

**Other Regulations:**

**EINECS:** This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications:**

**WHMIS (Canada):** Not controlled under WHMIS (Canada).

**DSCL (EEC):** R22- Harmful if swallowed. S24/25- Avoid contact with skin and eyes. S36- Wear suitable protective clothing.

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

**Health Hazard: 1**

**Fire Hazard: 1**

**Reactivity: 0**

**Personal Protection: E**

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

**Health: 1**

**Flammability: 1**

**Reactivity: 0**

**Specific hazard:**

**Protective Equipment:**

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

## Section 16 - Additional Information

**References:** Not available.

**Other Special Considerations:** Not available.

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