

# OXFORD LAB FINE CHEM LLP

ISO 9001-2008 Certified Company

**Regd Office:** Unit no 12, 1st Floor,  
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## MATERIAL SAFETY DATA SHEET

### OSMIC ACID SOLUTION 2% W/V (For Microscopy) MSDS CAS:

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

##### Section 1: Chemical Product

**Product Name:** OSMIC ACID SOLUTION 2% W/V (For Microscopy)

**CAS#:** Not available.

**Synonym:** Not available.

**Chemical Name:** Osmic Acid Solution 2% W/V

**Chemical Formula:** Not available.

**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.  
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**Tel:** 91-250-2390989  
**Tel/Fax:** 91-250-2390032

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

**Substance / Preparation:** Preparation.

**Hazardous component(s):** This product is not hazardous but contains hazardous components.

SUBSTANCE NAME	CAS NO.	CONTENTS
Osmium tetroxide	20816-12-0	> 1 < 5 %
Water	7732-18-5	> 75 < 99 %

## Section 3: Hazards Identification

**Classification of the substance or mixture**

**Classification EC 67/548 or EC 1999/45**

**Classification** : Not classified.

**Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP):** Not classified.

**Health hazards:** Acute toxicity, dermal - Category 3 - Danger (CLP : Acute Tox. 3) H311

Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301

Acute toxicity, Inhalation - Category 3 - Danger (CLP : Acute Tox. 3) H331

**Other hazards** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

## Section 4: First Aid Measures

### Description of first aid measures:

**Inhalation:** Assure fresh air breathing. Allow the victim to rest. Specific treatment (see on this label).

Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor.

**Skin contact:** Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor. Wash with plenty of soap and water. Wash contaminated clothing before reuse. Remove/Take off immediately all contaminated clothing.

**Eye contact:** Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

**Ingestion:** Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). Do NOT induce vomiting. Rinse mouth.

### Most important symptoms and effects, both acute and delayed:

**Symptoms relating to use:** Repeated exposure to this material can result in absorption through skin causing significant health hazard. Danger of serious damage to health by prolonged exposure through inhalation. Swallowing a small quantity of this material will result in serious health hazard.

### Indication of any immediate medical attention and special treatment needed:

**General information:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

## Section 5: Fire and Explosion Data

### Extinguishing media:

**Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.  
**Unsuitable extinguishing media** : Do not use a heavy water stream.  
**Surrounding fires** : Use water spray or fog for cooling exposed containers.

### Special hazards arising from the substance or mixture:

**Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

### Advice for fire-fighters:

**Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.

**Special procedures** : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures:

**For emergency responders:** Equip cleanup crew with proper protection. Ventilate area.

**For non-emergency personnel:** Evacuate unnecessary personnel.

### Environmental precautions:

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

### Methods and material for containment and cleaning up:

**Clean up methods:** On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

## Section 7: Handling and Storage

### Precautions for safe handling

**Handling** : Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume, gas, mist, vapours, spray.

**Technical protective measures** : Provide good ventilation in process area to prevent formation of vapour.

## Section 7: Handling and Storage (Continued)

### Conditions for safe storage, including any incompatibilities:

**Storage :** Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.

**Storage - away from :** Strong bases. Strong acids. Sources of ignition. Direct sunlight.

## Section 8: Exposure Controls/Personal Protection

### Exposure controls:

**Personal protection:** Avoid all unnecessary exposure.

- **Respiratory protection:** Wear approved mask.
- **Hand protection:** Wear protective gloves.
- **Skin protection:** Wear suitable protective clothing.
- **Eye protection:** Chemical goggles or safety glasses.
- **Others:** When using, do not eat, drink or smoke.

### Control parameters:

**Occupational Exposure Limits:** No data available.

## Section 9: Physical and Chemical Properties

<b>Physical state and appearance</b>	: Liquid
<b>Odor</b>	: sharp chlorine like odor.
<b>Taste</b>	: Not available.
<b>Molecular Weight</b>	: Not available.
<b>Color</b>	: Colorless to pale yellow.
<b>pH (1% soln/water)</b>	: 6 - 7
<b>Boiling Point</b>	: 100 °C
<b>Melting Point</b>	: Not available.
<b>Critical Temperature</b>	: Not available.
<b>Specific Gravity</b>	: Not available.
<b>Vapor Pressure</b>	: Not applicable.
<b>Vapor Density</b>	: Not available.
<b>Volatility</b>	: Not available.
<b>Odor Threshold</b>	: Not available.

## Section 9: Physical and Chemical Properties

Water/Oil Dist. Coeff.	: Not available.
Ionicity (in Water)	: Not available.
Dispersion Properties	: Not available.
Solubility	: 5g OsO4/100 ml

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions to avoid:** Direct sunlight. Extremely high or low temperatures.

**Incompatibility with various substances:** Not available.

**Materials to avoid:** Strong acids. Strong bases.

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

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

**Hazardous decomposition products:** Fumes. Carbon monoxide. Carbon dioxide.

## Section 11: Toxicological Information

**Information on toxicological effects:**

**Toxicity information:** The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.

**Acute toxicity:**

- Inhalation: Toxic if inhaled.
- Dermal: Toxic in contact with skin.
- Ingestion: Toxic if swallowed.

**Irritation:** Based on available data, the classification criteria are not met.

**Corrosion:** Based on available data, the classification criteria are not met.

## Section 11: Toxicological Information (Continued)

**Sensitization:** Based on available data, the classification criteria are not met.

**Mutagenicity:** Based on available data, the classification criteria are not met.

**Carcinogenicity:** Based on available data, the classification criteria are not met.

**Toxic for reproduction:** Based on available data, the classification criteria are not met.

**STOT-single exposure:** Based on available data, the classification criteria are not met.

**STOT-repeated exposure:** Based on available data, the classification criteria are not met.

**Aspiration hazard:** Based on available data, the classification criteria are not met.

## Section 12: Ecological Information

**Toxicity information:** The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations

**BOD5 and COD:** Not available.

**Persistence - degradability:** Biodegradable.

**Bioaccumulative potential:** Not established.

**Toxicity of the Products of Biodegradation:** Not available.

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

**Results of PBT and vPvB assessment:** The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

**Environmental precautions:** Avoid release to the environment.

## Section 13: Disposal Considerations

### **Waste Disposal:**

**General:** Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Special precautions:** Hazardous waste due to toxicity.

## Section 14: Transport Information

### Land transport (ADR-RID)

**Proper shipping name :** TOXIC LIQUID, INORGANIC, N.O.S.

**UN N° :** 3287

**ADR - Class :** 6.1

**Labelling – Transport :** 6.1 : Toxic substances.

**Packing group (ADR) :** II

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

**Proper shipping name :** TOXIC LIQUID, INORGANIC, N.O.S.

**UN N° :** 3287

**IMO-IMDG - Class or division :** 6.1 : Toxic substances.

**IMO-IMDG - Packing group :** II

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

**Proper shipping name :** TOXIC LIQUID, INORGANIC, N.O.S.

**UN N° :** 3287

**IATA - Class or division :** 6.1 : Toxic substances.

**IATA - Packing group :** II

## Section 15: Other Regulatory Information

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

Ensure all national/local regulations are observed.

**REACH Restrictions - Annex XVII :** The components of this product are not subject to restrictions.

**REACH Authorisation - Annex XIV :** The components of this product are not subject to authorization.

### **Chemical Safety Assessment:**

**Chemical Safety Assessment :** It has not been carried out.



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## Section 16 - Additional Information

**References:** Not available.

**Other Special Considerations:** Not available.

### ***Disclaimer:***

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