

## **MATERIAL SAFETY DATA SHEET**

### **ZINC ACETATE (Dihydrate) (Extra Pure) MSDS CAS: 5970-45-6**

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

##### **Section 1: Chemical Product**

**Product Name:** Zinc acetate

**CAS#:** 5970-45-6

**Synonym:** Acetic acid, zinc salt, dihydrate; Zinc diacetate, dihydrate

**Chemical Name:** Zinc Acetate, dehydrate

**Chemical Formula:** (CH<sub>3</sub>COO) <sub>2</sub>-Zn.2H<sub>2</sub>O or C<sub>4</sub>-H<sub>6</sub>-O<sub>4</sub>- Zn.2H<sub>2</sub>O

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

##### **Composition:**

Name	CAS #	% by Weight
Zinc acetate	5970-45-6	98%

**Toxicological Data on Ingredients:** Zinc acetate: ORAL (LD<sub>50</sub>): Acute: 794 mg/kg [Rat]. 287 mg/kg [Mouse].

## Section 3: Hazards Identification

**Potential Acute Health Effects:** Hazardous in case of eye contact (irritant). Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

**Potential Chronic Health Effects:**

**CARCINOGENIC EFFECTS:** Not available. **MUTAGENIC EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance may be toxic to kidneys. Repeated or prolonged exposure to the substance can produce target organs damage.

## 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.

## 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.

## Section 5: Fire and Explosion Data (Continued)

**Flammable Limits:** Not available.

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>). Some metallic oxides.

**Fire Hazards in Presence of Various Substances:** Slightly flammable to flammable in presence of heat.

**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:** When heated to decomposition it emits acrid smoke and irritating fumes of zinc oxide.

**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.

## 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. Avoid contact with eyes. 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.

## Section 7: Handling and Storage (Continued)

### 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. (Slightly efflorescent)
Odor:	acetic acid odour.
Taste:	Astringent.
Molecular Weight:	219.5 g/mole
Color:	Colourless crystalline.
pH (1% soln/water):	6 - 8 at 50 g/l at 25 °C
Boiling Point:	Not available.
Melting Point:	237°C (458.6°F)
Critical Temperature:	Not available.
Specific Gravity:	1.735 (Water = 1)
Vapor Pressure:	Not applicable.
Vapor Density:	Not available.

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

<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.
<b>Solubility:</b>	Water: 430 g/l at 20 °C.
<b>Solubility in alcohol:</b>	1 gram dissolves in 30 ml alcohol, 1 ml boiling alcohol.

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.  
**Instability Temperature:** Not available.  
**Conditions of Instability:** Excess heat, incompatible materials  
**Incompatibility with various substances:** Reactive with oxidizing agents..  
**Corrosivity:** Non-corrosive in presence of glass.  
**Special Remarks on Reactivity:** Loses 2H<sub>2</sub>O at 100 deg. C.  
**Special Remarks on Corrosivity:** Not available.  
**Polymerization:** Will not occur.

## Section 11: Toxicological Information

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

**Toxicity to Animals:** Acute oral toxicity (LD<sub>50</sub>): 287 mg/kg [Mouse]

**Chronic Effects on Humans:** May cause damage to the following organs: kidneys.

**Other Toxic Effects on Humans:** Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:** May affect genetic material (mutagenic). May cause adverse reproductive effects based on animal test data

## Section 11: Toxicological Information

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

**Acute Potential Health Effects:** Skin: May cause skin irritation. Eyes: Causes eye irritation. Ingestion: May be harmful if swallowed. May cause irritation of the digestive tract. Symptoms may include stomach cramps, stricture of the esophagus, nausea, vomiting. **Inhalation:** May cause respiratory tract (nose, throat) irritation causing coughing, and wheezing. **Chronic Potential Health Effects:** Ingestion: Prolonged or repeated ingestion may affect the blood, urinary system (kidneys).

## 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)

<b>Proper shipping name</b>	<b>: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.</b>
<b>UN N°</b>	<b>: 3077</b>
<b>H.I. nr</b>	<b>: 90</b>
<b>ADR – Class</b>	<b>: 9</b>

## Section 14: Transport Information (Continued)

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

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
UN N° : 3077  
IMO-IMDG - Class or division : 9: Miscellaneous dangerous substances and articles.  
IMO-IMDG - Packing group : III

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

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
UN N° : 3077  
IATA - Class or division : 9: Miscellaneous dangerous substances and articles.  
IATA - Packing group : III

## Section 15: Other Regulatory Information

### Federal and State Regulations:

Illinois chemical safety act: Zinc acetate (Cas No. 557-34-6) New York release reporting list: Zinc acetate (Cas No. 557-34-6) Pennsylvania RTK: Zinc acetate (Cas No. 557-34-6) Massachusetts RTK: Zinc acetate (Cas No. 557-34-6) Massachusetts spill list: Zinc acetate (Cas No. 557-34-6) New Jersey: Zinc acetate (Cas No. 557-34-6) New Jersey spill list: Zinc acetate (Cas No. 557-34-6) Louisiana spill reporting: Zinc acetate (Cas No. 557-34-6) California Director's List of Hazardous Substances: Listed as Zinc compounds SARA 313 toxic chemical notification and release reporting: Listed as Zinc compounds CERCLA: Hazardous substances.: Zinc acetate (Cas No. 557-34-6): 1000 lbs. (453.6 kg)

### Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). Zinc Acetate (CAS no. 557-34-6) is listed on the Canadian DSL, but Zinc Acetate, dihydrate (CAS no. 5970-45-6) is not listed on the Canadian DSL

### Other Classifications:

WHMIS (Canada): CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC): R22- Harmful if swallowed. R36- Irritating to eyes. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S39- Wear eye/face protection.



## Section 15: Other Regulatory Information (Continued)

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

**Health Hazard: 2**

**Fire Hazard: 1**

**Reactivity: 0**

**Personal Protection: E**

**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. Safety glasses.

## Section 16 - Additional Information

**References:** Not available.

**Other Special Considerations:** Not available.



## ***Disclaimer:***

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