

## **MATERIAL SAFETY DATA SHEET**

### **ANTIMONY TRICHLORIDE (EXTRA PURE) MSDS CAS: 10025-91-9**

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

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

**Product Name:** Antimony Trichloride

**CAS#:** 10025-91-9

**C.I. No.:** Not available.

**Synonym:** Antimonous Chloride; Antimony chloride; Antimony butter; Butter of antimony;  
Trichlorostibine

**Chemical Name:** Antimony (III) Chloride

**Chemical Formula:** SbCl<sub>3</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
Antimony Trichloride	10025-91-9	100

**Toxicological Data on Ingredients:** Antimony trichloride: ORAL (LD50): Acute: 525 mg/kg [Rat]. 574 mg/kg [Guinea pig].

## Section 3: Hazards Identification

### Potential Acute Health Effects:

Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (corrosive), of eye contact (corrosive). Slightly hazardous in case of skin contact (permeator). The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. 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:

**CARCINOGENIC EFFECTS:** Not available. **MUTAGENIC EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance may be toxic to lungs, liver, mucous membranes, cardiovascular system, skin, eyes. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung 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. Cold water may be used. Get medical attention immediately.

**Skin Contact:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

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

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

**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 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:** Non-flammable.

**Auto-Ignition Temperature:** Not applicable.

**Flash Points:** Not applicable.

**Flammable Limits:** Not applicable.

**Products of Combustion:** Not available.

**Fire Hazards in Presence of Various Substances:** Not applicable.

**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:** Not applicable.

**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.

### Large Spill:

Corrosive solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

## Section 7: Handling and Storage

### **Precautions:**

Keep container dry. Do not ingest. Do not breathe dust. 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. Keep away from incompatibles such as metals, 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:** Splash goggles. Synthetic apron. Vapor and 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. Vapor and 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:** TWA: 0.5 (mg/m<sup>3</sup>) from OSHA (PEL) [United States] TWA: 0.5 (mg/m<sup>3</sup>) from ACGIH (TLV) [United States] Consult local authorities for acceptable exposure limits.

## Section 9: Physical and Chemical Properties

<b>Physical state and appearance</b>	: Solid.
<b>Odor</b>	: Pungent. Unpleasant
<b>Taste</b>	: Not available.
<b>Molecular Weight</b>	: 228.13 g/mole
<b>Color</b>	: White to yellowish.
<b>pH (1% soln/water)</b>	: Not available.
<b>Boiling Point</b>	: 223.5°C (434.3°F)
<b>Melting Point</b>	: 73.4 (164.1°F)
<b>Critical Temperature</b>	: 520.85°C (969.5°F)
<b>Specific Gravity</b>	: Density: 3.14 (Water = 1)
<b>Vapor Pressure</b>	: Not applicable.
<b>Vapor Density</b>	: 7.9 (Air = 1)
<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, diethyl ether, acetone.
<b>Solubility</b>	: Easily soluble in cold water. Soluble in diethyl ether, acetone. Soluble in alcohol, chloroform (about 22%), benzene, carbon disulfide, dioxane, carbon tetrachloride (1.1 Molar). Solubility in water: 1g/10.1 ml water @ 25 deg. C

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Incompatible materials, moisture/water, dust generation

**Incompatibility with various substances:** Reactive with metals, acids. Slightly reactive to reactive with moisture.

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

**Special Remarks on Reactivity:** Hygroscopic; keep container tightly closed. Moisture sensitive.

Incompatible with aluminum, potassium and sodium, perchloric acid.

**Special Remarks on Corrosivity:** Corrodes most metals in the presence of moisture.

**Polymerization:** Will not occur.

## Section 11: Toxicological Information

**Routes of Entry:** Absorbed through skin. Eye contact. Inhalation. Ingestion.

**Toxicity to Animals:** Acute oral toxicity (LD50): 525 mg/kg [Rat].

**Chronic Effects on Humans:** May cause damage to the following organs: lungs, liver, mucous membranes, cardiovascular system, skin, eyes.

**Other Toxic Effects on Humans:** Very hazardous in case of skin contact (irritant), of ingestion, . Hazardous in case of skin contact (corrosive), of eye contact (corrosive), of inhalation (lung corrosive). Slightly hazardous in case of skin contact (permeator).

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

**Special Remarks on Chronic Effects on Humans:** May cause adverse reproductive effects.

**Special Remarks on other Toxic Effects on Humans:** Acute Potential Health Effects: Skin: Causes skin burns. Eyes: Causes conjunctivitis and eye burns. May cause permanent eye damage. Inhalation: It can cause respiratory tract (mouth, nose, throat, lung) irritation causing sore throat, inflammation of the lining of the mouth, nose, throat, poor appetite/anorexia, coughing, wheezing, and/or shortness of breath. Nausea and metallic taste may occur. Exposure to dust and fumes may also cause g i n g i v i t i s , b r o n c h i t i s , pulmonary edema, headache, dizziness, chest tightness. Ingestion: Causes gastrointestinal tract burns. May be harmful if swallowed. Can cause nausea, abdominal cramps, vomiting, watery diarrhea which may be bloody, and a metallic taste. It may affect the cardiovascular system Chronic Potential Health Effects:

Ingestion/Inhalation: Repeated exposure may cause headache, poor appetite, dry throat, lack of sleep. It may also damage the liver, heart, especially with frequent or higher exposures. Other signs and symptoms of chronic exposure may include ECG changes, laryngitis, tracheitis, bronchitis, pneumonitis, pneumoconiosis, ulceration of the nasal septum, and larynx. Prolonged or repeated ingestion may also affect the blood (pigmented or nucleated red blood cells, changes in cell count, changes in serum composition). Skin: Repeated or prolonged skin contact may contact allergy. It may also cause papules, and pustules around sweat and sebaceous glands.

## 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>: ANTIMONY TRICHLORIDE</b>
<b>UN N°</b>	<b>: 1733</b>
<b>H.I. nr</b>	<b>: 80</b>
<b>ADR - Class</b>	<b>: 8</b>
<b>Labelling – Transport</b>	<b>: 8 : Corrosive substance.</b>
<b>ADR – Group</b>	<b>: II</b>

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

<b>Proper shipping name</b>	<b>: ANTIMONY TRICHLORIDE</b>
<b>UN N°</b>	<b>: 1733</b>
<b>IMO-IMDG - Class or division</b>	<b>: 8 : Corrosive substance.</b>
<b>IMO-IMDG - Packing group</b>	<b>: II</b>



## Section 14: Transport Information(Continued)

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

Proper shipping name	: ANTIMONY TRICHLORIDE
UN N°	: 1733
IATA - Class or division	: 8 : Corrosive substance.
IATA - Packing group	: II

## Section 15: Other Regulatory Information

### Federal and State Regulations:

Connecticut hazardous material survey.: Antimony trichloride Illinois chemical safety act: Antimony trichloride New York

release reporting list: Antimony trichloride Pennsylvania RTK: Antimony trichloride Massachusetts RTK: Antimony trichloride

Massachusetts spill list: Antimony trichloride New Jersey: Antimony trichloride New Jersey spill list: Antimony trichloride

Louisiana spill reporting: Antimony trichloride California Director's List of Hazardous Substances: Antimony trichloride TSCA

8(b) inventory: Antimony trichloride SARA 313 toxic chemical notification and release reporting: Antimony trichloride (listed as

Antimony compounds) CERCLA: Hazardous substances.: Antimony trichloride: 1000 lbs. (453.6 kg)

### Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the

European Inventory of Existing Commercial Chemical Substances.

### Other Classifications:

WHMIS (Canada): CLASS E: Corrosive solid.

DSCL (EEC):

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 0

Reactivity: 1

Personal Protection: j

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

Health: 3

Flammability: 0

Reactivity: 1

## Section 15: Other Regulatory Information(Continued)

**Specific hazard:**

**Protective Equipment:** Gloves. Synthetic apron. Vapor and 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:***

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