

# Material Safety Data Sheet

## Methanesulfonyl chloride MSDS

### Section 1: Chemical Product and Company Identification

**Product Name:** Methanesulfonyl chloride

**Catalog Codes:** SLM1702

**CAS#:** 124-63-0

**RTECS:** PB2790000

**TSCA:** TSCA 8(b) inventory: Methanesulfonyl chloride

**CI#:** Not available.

**Synonym:**

**Chemical Name:** Not available.

**Chemical Formula:** CH<sub>3</sub>ClO<sub>2</sub>S

**CHEMTREC (24HR Emergency Telephone), call:**

1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

### Section 2: Composition and Information on Ingredients

**Composition:**

**Name CAS # % by Weight**

Methanesulfonyl chloride 124-63-0 100

**Toxicological Data on Ingredients:** Methanesulfonyl chloride: ORAL (LD50): Acute: 50 mg/kg [Rat]. 200 mg/kg [Mouse].

### Section 3: Hazards Identification

**Potential Acute Health Effects:**

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

of skin contact (corrosive), of eye contact (corrosive). Liquid or spray mist may produce tissue damage particularly on mucous

membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce

severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Severe over-exposure can

result in 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. Repeated or prolonged contact with spray mist may produce

chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract

irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general

deterioration of health by an accumulation in one or many human organs.

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### 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 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. 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:**

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

**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:** CLOSED CUP: 110°C (230°F).

**Flammable Limits:** Not available.

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

**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:** Absorb with an inert material and put the spilled material in an appropriate waste disposal.

**Large Spill:**

Corrosive liquid. Poisonous liquid. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to

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reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

**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 gas/fumes/ vapor/spray. 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.

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

## **Section 8: Exposure Controls/Personal Protection**

### **Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

### **Personal Protection:**

Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots.

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

Splash goggles. Full suit. Vapor 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:** Liquid.

**Odor:** Not available.

**Taste:** Not available.

**Molecular Weight:** 114.55 g/mole

**Color:** Not available.

**pH (1% soln/water):** Not available.

**Boiling Point:** 161°C (321.8°F)

**Melting Point:** Not available.

**Critical Temperature:** Not available.

**Specific Gravity:** 1.4805 (Water = 1)

**Vapor Pressure:** Not available.

**Vapor Density:** 3 (Air = 1)

**Volatility:** Not available.

**Odor Threshold:** Not available.

**Water/Oil Dist. Coeff.:** Not available.

**Ionicity (in Water):** Not available.

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**Dispersion Properties:** Not available.

**Solubility:** Not available.

## **Section 10: Stability and Reactivity Data**

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Not available.

**Incompatibility with various substances:** Slightly reactive to reactive with moisture.

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

**Special Remarks on Reactivity:** Moisture sensitive

**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 (LD50): 50 mg/kg [Rat].

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

### **Other Toxic Effects on Humans:**

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

hazardous in case of skin contact (corrosive), of eye contact (corrosive).

**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 as toxic as 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**

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**DOT Classification:**

Class 8: Corrosive material CLASS 6.1: Poisonous material.

**Identification:** : Methanesulfonyl Chloride UNNA: 3246 PG: I

**Special Provisions for Transport:** Not available.

## **Section 15: Other Regulatory Information**

**Federal and State Regulations:** TSCA 8(b) inventory: Methanesulfonyl chloride

**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). CLASS E: Corrosive liquid.

**DSCL (EEC):**

R22- Harmful if swallowed. R34- Causes burns. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S46- If

swallowed, seek medical advice immediately and show this container or label.

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

**Health Hazard:** 3

**Fire Hazard:** 1

**Reactivity:** 1

**Personal Protection:**

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

**Health:** 3

**Flammability:** 1

**Reactivity:** 1

**Specific hazard:**

**Protective Equipment:**

Gloves. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator

when ventilation is inadequate. Face shield.

## **Section 16: Other Information**

**References:** Not available.

**Other Special Considerations:** Not available.

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## **METHANE SULFONYL CHLORIDE 001491**

**CH<sub>3</sub>ClO<sub>2</sub>S**

### **SPECIFICATIONS**

Methane Sulfonyl Chloride (wt. %) ≥ 99.7

Color Water White to Light Yellow

Water, ppm ≤ 250

The above specifications are determined according Arkema Inc. analytical methods.

### **PROPERTIES**

Molecular Weight Calculated 114.6

Specific Gravity @ 20°C 1.475 - 1.480

Average Weight, Pounds Per Gallon 12.3

Flash Point COC, °F 230

Freezing Point, °C -33

Viscosity @ 25°C (centistokes) 1.33

Coefficient of Cubical Expansion/°C 0.00082

Refractive Index @ 25°C 1.45

### **MISCELLANEOUS**

CAS No.: 124-63-0

Available in 55 gallon, steel/PE Composite drum at 600 lbs., 55 gallon steel/PE Composite drum/85 gallon

steel overpack at 600 lbs., 5 gallon plastic drum at 60 lbs. and 5 gallon plastic drum /20 gallon steel overpack at 60 lbs.