Material Safety Data Sheet
Methanesulfonyl chloride

MSDS# 28050

Section 1 - Chemical Product and Company Identification

MSDS Name: Methanesulfonyl chloride
Catalog Numbers: AC125640000, AC125640010, AC125640050, AC125641000, AC125642500
Synonyms: Mesyl chloride; MsCl

Company Identification:
Acros Organics BVBA
Janssen Pharmaceuticaalaan 3a
2440 Geel, Belgium

Company Identification: (USA)
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 124-63-0
Chemical Name: Methanesulfonyl chloride
%: 99.5
EINECS#: 204-706-1

Hazard Symbols: T+

Risk Phrases: 24/25 26 34 41

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Danger! May cause blindness. Eye contact may result in permanent eye damage. May be fatal if inhaled. Causes burns by all exposure routes. Toxic if swallowed. Toxic if absorbed through the skin. Target Organs: Kidneys, central nervous system, respiratory system, gastrointestinal system, eyes, skin.

Potential Health Effects
Eye: Causes eye burns. Lachrymator (substance which increases the flow of tears).
Skin: Causes skin burns. May cause dermatitis. Toxic in contact with skin.
Ingestion: Causes gastrointestinal tract burns. Toxic if swallowed.
Inhalation: May be fatal if inhaled. Causes chemical burns to the respiratory tract.
Chronic: Laboratory experiments have resulted in mutagenic effects. May cause kidney damage. Exposure to high concentrations may cause central nervous system depression.

Section 4 - First Aid Measures
Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: POISON material. If swallowed, get medical aid immediately. Only induce vomiting if directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. SPEED IS ESSENTIAL, OBTAIN MEDICAL AID IMMEDIATELY. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. SPEED IS ESSENTIAL, OBTAIN MEDICAL AID IMMEDIATELY. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to Physician:

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Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media: Use foam, dry chemical, or carbon dioxide.

Autoignition Temperature: Not available.

Flash Point: 110 deg C (230.00 deg F)

Explosion Limits: Not available

Explosion Limits:

Lower: Not available

Upper: Not available

NFPA Rating: health: 4; flammability: 1; instability: 1;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wear a self-contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Provide ventilation. Evacuate unnecessary personnel. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Container should be opened by a technically qualified person. Use only in a chemical fume hood.


Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
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<tbody>
<tr>
<td>Methanesulfonyl chl</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
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<tr>
<td>oride</td>
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OSHA Vacated PELs: Methanesulfonyl chloride: None listed

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective clothing to prevent skin exposure.

Clothing: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or
Respirators: European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: clear light yellow
Odor: pungent odor
pH: Not available
Vapor Pressure: 2.6 mbar @ 20 deg C
Vapor Density: 4 (air = 1)
Evaporation Rate: Not available
Viscosity: 1.97 mPa @ 25 deg C
Boiling Point: 161 deg C @ 760 mmHg (321.80°F)
Freezing/Melting Point: -33 deg C (-27.40°F)
Decomposition Temperature: Not available
Solubility in water: Insoluble
Specific Gravity/Density: 1.480
Molecular Formula: CH3ClO2S
Molecular Weight: 114.55

Section 10 - Stability and Reactivity

Chemical Stability: Moisture sensitive.
Conditions to Avoid: Incompatible materials, temperatures above 65°C, exposure to moist air or water.
Incompatibilities with Other Materials: Strong oxidizing agents, acids, strong bases, alcohols.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 124-63-0: PB2790000
RTECS:
CAS# 124-63-0: Dermal, guinea pig: LD50 = 100 uL/kg;
Draize test, rabbit, eye: 100 mg Severe;
LD50/LC50:
Draize test, rabbit, skin: 500 mg Severe;
Oral, mouse: LD50 = 200 mg/kg;
Oral, rat: LD50 = 50 mg/kg;

Carcinogenicity: Methanesulfonyl chloride - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity: Not available
Other: Do not empty into drains.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: METHANESULFONYL CHLORIDE
Hazard Class: 6.1
UN Number: UN3246
Packing Group: I
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T+

Risk Phrases:
- R 24/25 Toxic in contact with skin and if swallowed.
- R 26 Very toxic by inhalation.
- R 34 Causes burns.
- R 41 Risk of serious damage to eyes.

Safety Phrases:
- S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S 28A After contact with skin, wash immediately with plenty of water.
- S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 124-63-0: 2

Canada

CAS# 124-63-0 is listed on Canada's DSL List

Canadian WHMIS Classifications: D1A, E

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 124-63-0 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 124-63-0 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 1/29/1998
Revision #5 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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