



Material Safety Data Sheet

Oxalyl chloride

Section 1 - Chemical Product and Company Identification

MSDS Name: Oxalyl chloride
Catalog Numbers: 12961-0000, 12961-0010, 12961-0250, 12961-1000
Synonyms: Ethanedioyl dichloride

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaaan 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
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#	Hazard Symbols:	Risk Phrases:
75-44-5	Phosgene	<1%	200-870-3	T+	26 34
76-02-8	Trichloroacetylchloride	<1%	200-926-7	T+	22 26 35
79-37-8	Oxalyl chloride	98%	201-200-2	T	14 23/24/25 29 34

Text for R-phrases: see Section 16

Hazard Symbols: T



Risk Phrases: 14 23/24/25 29 34

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Reacts violently with water. Toxic by inhalation, in contact with skin and if swallowed.
Contact with water liberates toxic gas. Causes burns.

Potential Health Effects

- Eye:** Causes eye burns. Lachrymator (substance which increases the flow of tears). May cause visual impairment.
- Skin:** Contact with liquid is corrosive and causes severe burns and ulceration. Toxic in contact with skin.
- Ingestion:** Causes gastrointestinal tract burns. Toxic if swallowed.
- Inhalation:** Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Toxic if inhaled.
- Chronic:**

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. If water-reactive products are embedded in the skin, no water should be applied. The embedded products should be covered with a light oil.
- Ingestion:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately. Wash mouth out with water.
- Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- Notes to Physician:** Treat symptomatically and supportively.

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. Water Reactive. Material will react with water and may release a flammable and/or toxic gas.
- Extinguishing Media:** Use water spray to cool fire-exposed containers. Use foam, dry chemical, or carbon dioxide. **DO NOT USE WATER!**

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.

Section 7 - Handling and Storage

- Handling:** Do not allow water to get into the container because of violent reaction. Contents may develop pressure upon prolonged storage. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Handle under exclusion of atmospheric pressure. Use only in a chemical fume hood.
- Storage:** Store in a tightly closed container. Store in a dry area. Keep under a nitrogen

blanket. Keep refrigerated. (Store below 4°C/39°F.)

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

CAS# 75-44-5:

United Kingdom, WEL - TWA: 0.02 ppm TWA; 0.08 mg/m³ TWA

United Kingdom, WEL - STEL: 0.06 ppm STEL; 0.25 mg/m³ STEL

United States OSHA: 0.1 ppm TWA; 0.4 mg/m³ TWA

Belgium - TWA: 0.02 ppm VLE; 0.08 mg/m³ VLE Belgium - STEL: 0.1 ppm VLE; 0.4 mg/m³ VLE

France - VME: 0.02 ppm VME; 0.08 mg/m³ VME France - VLE: 0.1 ppm VLE; 0.4 mg/m³ VLE

Germany: 0.02 ppm TWA; 0.082 mg/m³ TWA

Japan: 0.1 ppm OEL; 0.4 mg/m³ OEL

Malaysia: 0.1 ppm TWA; 0.40 mg/m³ TWA

Netherlands: 0.1 ppm STEL; 0.4 mg/m³ STEL Netherlands: 0.02 ppm MAC; 0.08 mg/m³ MAC

Spain: 0.02 ppm VLA-ED; 0.08 mg/m³ VLA-ED Spain: 0.1 ppm VLA-EC; 0.4 mg/m³ VLA-EC

CAS# 76-02-8:

CAS# 79-37-8:

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149

Respirators: approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid

Color: colorless to pale yellow

Odor: pungent odor

pH: Not available

Vapor Pressure: 232hPa @19 deg C

Viscosity: Not available

Boiling Point: 63 - 64 deg C @763mmHg

Freezing/Melting Point: -12 deg C (10.40°F)

Autoignition Temperature: Not available

Flash Point: > 100 deg C (> 212.00 deg F)

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

Decomposition Temperature:

Solubility in water: Reacts

Specific Gravity/Density: 1.478

Molecular Formula: C2Cl2O2

Molecular Weight: 126.93

Section 10 - Stability and Reactivity

Chemical Stability: Reacts violently with water. Moisture sensitive.

Conditions to Avoid: Incompatible materials, light, exposure to moist air or water.

Incompatibilities with Other Materials Water, oxidizing agents, bases, alcohols, amines, steel, dimethyl formamide.

Hazardous Decomposition Products Hydrogen chloride, phosgene, carbon monoxide, carbon dioxide.

Hazardous Polymerization Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 75-44-5: SY5600000
 CAS# 76-02-8: AO7140000
 CAS# 79-37-8: KI2950000

RTECS: Not available. RTECS:
CAS# 76-02-8: Inhalation, mouse: LC50 = 445 mg/m3;
 Inhalation, rat: LC50 = 475 mg/m3/4H;
 Oral, rat: LD50 = 600 mg/kg;

LD50/LC50:

RTECS:
CAS# 79-37-8: Inhalation, rat: LC50 = 1840 ppm/1H;
 .
 Other:
 Phosgene - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
 Trichloroacetylchloride - Not listed as a carcinogen by ACGIH, IARC,
 Carcinogenicity: NTP, or CA Prop 65.
 Oxalyl 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

Other: Avoid entering into waters or underground water. 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

	IATA	IMO	RID/ADR
Shipping Name:	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.*	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.	TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.
Hazard Class:	6.1 (8)	6.1 (8)	6.1 (8)
UN Number:	2927	2927	2927

Packing Group: II II II

USA RQ: CAS# 75-44-5: 10 lb final RQ; 4.54 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T

Risk Phrases:

R 14 Reacts violently with water.

R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R 29 Contact with water liberates toxic gas.

R 34 Causes burns.

Safety Phrases:

S 8 Keep container dry.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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# 75-44-5: 2

CAS# 76-02-8: 2

CAS# 79-37-8: 2

Canada

CAS# 75-44-5 is listed on Canada's DSL List

CAS# 76-02-8 is listed on Canada's DSL List

CAS# 79-37-8 is listed on Canada's DSL List

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US Federal

TSCA

CAS# 75-44-5 is listed on the TSCA Inventory.

CAS# 76-02-8 is listed on the TSCA Inventory.

CAS# 79-37-8 is listed on the TSCA Inventory.

Section 16 - Other Information

Text for R-phrases from Section 2

R 14 Reacts violently with water.

R 22 Harmful if swallowed.

R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R 26 Very toxic by inhalation.

R 29 Contact with water liberates toxic gas.

R 34 Causes burns.

R 35 Causes severe burns.

MSDS Creation Date: 9/12/1996

Revision #2 Date 4/21/2004

Revisions were made in Sections: General revision.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability 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.
