Oxal chloride (cas 79-37-8) MSDS

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Oxal chloride

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

According to Regulation (EC) No1272/2008
Acute toxicity, Inhalation (Category 3)
Skin corrosion (Category 1A)

Toxic by inhalation. Causes burns. Reacts violently with water. Contact with water liberates toxic gas.

Label elements

Pictogram

Signal word : Danger

Hazard statement(s)
H314 Causes severe skin burns and eye damage.
H331 Toxic if inhaled.
EUH014 Reacts violently with water.
EUH029 Contact with water liberates toxic gas.

Precautionary statement(s)
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/ physician.

Hazard symbol(s)
T Toxic

R-phrase(s)
R14 Reacts violently with water.
R23 Toxic by inhalation.
R29 Contact with water liberates toxic gas.
R34 Causes burns.

S-phrase(s)
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
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).

Other hazards

Lachrymator.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Ethanedioyl dichloride

Formula : C2Cl2O2
Oxalyl chloride
79-37-8  201-200-2 - Acute Tox. 3; Skin Corr. 1A; H314, H331, EUH014, EUH029, T, R14 - R23 - R29 - R34

Phosgene
75-44-5  200-870-3 - Press. Gas; Acute Tox. 2; Skin Corr. 1B; H314, H330 T+, R26 - R34

Trichloroacetyl chloride
76-02-8  200-926-7 - Acute Tox. 1; Acute Tox. 4; Skin Corr. 1B; H302, H314, H330, EUH014 T+, R14 - R22 - R26 - R34

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Carbon dioxide (CO2) Dry powder

Extinguishing media which shall not be used for safety reasons
Water

Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste. Do not flush with water. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Normal measures for preventive fire protection.
Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.
Never allow product to get in contact with water during storage.
Store under inert gas. Moisture sensitive. Store under inert gas.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection
Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection
Complete suit protecting against chemicals. Flame retardant protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
<table>
<thead>
<tr>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>liquid</td>
</tr>
</tbody>
</table>

Safety data

<table>
<thead>
<tr>
<th>pH</th>
<th>no data available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point</td>
<td>-10 - -8 °C - lit.</td>
</tr>
<tr>
<td>Boiling point</td>
<td>62 - 65 °C - lit.</td>
</tr>
<tr>
<td>Flash point</td>
<td>no data available</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>no data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>no data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>no data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>200 hPa at 20 °C</td>
</tr>
<tr>
<td>Density</td>
<td>1,5 g/cm3 at 20 °C</td>
</tr>
<tr>
<td>Water solubility</td>
<td>no data available</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>4,4</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
Reacts violently with water.

Conditions to avoid
Exposure to moisture.

Materials to avoid
Bases, Oxidizing agents, Alcohols, Water, Steel (all types and surface treatments)

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas, Phosgene

11. TOXICOLOGICAL INFORMATION

Acute toxicity
LC50 Inhalation - rat - 1 h - 1840 ppm

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation

Respiratory or skin sensitization
no data available

Germ cell mutagenicity
no data available

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
no data available

Specific target organ toxicity - single exposure
no data available

Specific target organ toxicity - repeated exposure
no data available

Aspiration hazard
no data available

Potential health effects

<table>
<thead>
<tr>
<th>Route</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>May be harmful if swallowed. Causes burns.</td>
</tr>
<tr>
<td>Skin</td>
<td>May be harmful if absorbed through skin. Causes skin burns.</td>
</tr>
<tr>
<td>Eyes</td>
<td>Causes eye burns.</td>
</tr>
</tbody>
</table>

Signs and Symptoms of Exposure
burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonia, pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

Additional Information
RTECS: Not available

12. ECOLOGICAL INFORMATION

Toxicity
no data available

Persistence and degradability
no data available

Bioaccumulative potential
13. DISPOSAL CONSIDERATIONS

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

ADR/RID
UN-Number: 2922 Class: 8 (6.1) Packing group: I
Proper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (Oxalyl chloride)

IMDG
UN-Number: 2922 Class: 8 (6.1) Packing group: I
Proper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (Oxalyl chloride)
EMS-No: F-A, S-B
Marine pollutant: No

IATA
UN-Number: 2922 Class: 8 (6.1) Packing group: I
Proper shipping name: Corrosive liquid, toxic, n.o.s. (Oxalyl chloride)

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. OTHER INFORMATION

Text of H-code(s) and R-phrase(s) mentioned in Section 3

Acute Tox. Acute toxicity
E14014 Reacts violently with water.
E14029 Contact with water liberates toxic gas.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H330 Fatal if inhaled.
H331 Toxic if inhaled.
Press. Gas Gases under pressure
Skin Corr. Skin corrosion
T Toxic
R14 Reacts violently with water.
R22 Harmful if swallowed.
R23 Toxic by inhalation.
R26 Very toxic by inhalation.
R29 Contact with water liberates toxic gas.
R34 Causes burns.
T+ Very toxic

Further information

The above information is believed to be correct but does not purport to be all inclusive and
shall be used only as a guide. The information in this document is based on the current state
of our knowledge and is applicable to the product with regard to appropriate safety precautions.
It does not represent any guarantee of the properties of the product. Guidechem shall not be
held liable for any damage resulting from handling or from contact with the above product.
See reverse side of invoice or packing slip for additional terms and conditions of sale.