Chromium chloride(CrCl2) (cas 10049-05-5) MSDS

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

1.1 Product identifiers
Product name : Chromium(II) chloride
Product Number : 244805
Brand : Anonymous
CAS-No. : 10049-05-5

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses : Laboratory chemicals, Manufacture of substances

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Acute toxicity, Oral (Category 4)
Skin irritation (Category 2)
Eye irritation (Category 2)
Specific target organ toxicity - single exposure (Category 3)

Classification according to EU Directives 67/548/EEC or 1999/45/EC
Harmful if swallowed. Irritating to eyes, respiratory system and skin.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram

Signal word Warning
Hazard statement(s)
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statement(s)
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Statements
none

Safety data sheet available on request.


Hazard symbol(s)

R-phrase(s)
R22 Harmful if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.

S-phrase(s)
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36 Wear suitable protective clothing.

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Formula : Cl2Cr
Molecular Weight : 122.90 g/mol

Component
Concentration
Chromium dichloride
CAS-No. 10049-05-5
EC-No. 233-163-3

4. **FIRST AID MEASURES**

4.1 **Description of 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**
Wash off with soap and plenty of water. 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**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 **Most important symptoms and effects, both acute and delayed**
Cough, Shortness of breath, Headache, Nausea, Vomiting

4.3 **Indication of any immediate medical attention and special treatment needed**
No data available

5. **FIRE-FIGHTING MEASURES**

5.1 **Extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 **Special hazards arising from the substance or mixture**
Hydrogen chloride gas, Chromium oxides

5.3 **Advice for firefighters**
Wear self contained breathing apparatus for fire fighting if necessary.

5.4 **Further information**
No data available

6. **ACCIDENTAL RELEASE MEASURES**

6.1 **Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 **Environmental precautions**
Do not let product enter drains.

6.3 **Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 **Reference to other sections**
For disposal see section 13.

7. **HANDLING AND STORAGE**

7.1 **Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

7.2 **Conditions for safe storage, including any incompatibilities**
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 **Specific end uses**
No data available

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1 **Control parameters**
Components with workplace control parameters

8.2 **Exposure controls**
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
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.

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

**Body Protection**
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. **PHYSICAL AND CHEMICAL PROPERTIES**

9.1 Information on basic physical and chemical properties

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<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>a) Appearance</td>
<td>Form: powder</td>
</tr>
<tr>
<td></td>
<td>Colour: grey</td>
</tr>
<tr>
<td>b) Odour</td>
<td>no data available</td>
</tr>
<tr>
<td>c) Odour Threshold</td>
<td>no data available</td>
</tr>
<tr>
<td>d) pH</td>
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</tr>
<tr>
<td>e) Melting point/freezing point</td>
<td>Melting point/range: 824 °C - lit.</td>
</tr>
<tr>
<td>f) Initial boiling point and boiling range</td>
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<tr>
<td>g) Flash point</td>
<td>not applicable</td>
</tr>
<tr>
<td>h) Evaporation rate</td>
<td>no data available</td>
</tr>
<tr>
<td>i) Flammability (solid, gas)</td>
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</tr>
<tr>
<td>j) Upper/lower flammability or explosive limits</td>
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</tr>
<tr>
<td>k) Vapour pressure</td>
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</tr>
<tr>
<td>l) Vapour density</td>
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</tr>
<tr>
<td>m) Relative density</td>
<td>2.9 g/cm³ at 25 °C</td>
</tr>
<tr>
<td>n) Water solubility</td>
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</tr>
<tr>
<td>o) Partition coefficient: n-octanol/water</td>
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</tr>
<tr>
<td>p) Autoignition temperature</td>
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<tr>
<td>q) Decomposition temperature</td>
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<td>r) Viscosity</td>
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</tr>
<tr>
<td>s) Explosive properties</td>
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<tr>
<td>t) Oxidizing properties</td>
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</tbody>
</table>

9.2 Other safety information

no data available

10. **STABILITY AND REACTIVITY**

10.1 Reactivity

no data available

10.2 Chemical stability

no data available
10.3 Possibility of hazardous reactions
no data available

10.4 Conditions to avoid
no data available

10.5 Incompatible materials
Oxidizing agents

10.6 Hazardous decomposition products
Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION
11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - rat - 1.870 mg/kg

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available

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
Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure
no data available

Aspiration hazard
no data available

Potential health effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion Harmful if swallowed.
Skin May be harmful if absorbed through skin. Causes skin irritation.
Eyes Causes serious eye irritation.

Signs and Symptoms of Exposure
Cough, Shortness of breath, Headache, Nausea, Vomiting

Additional Information
RTECS: GB5250000

12. ECOLOGICAL INFORMATION
12.1 Toxicity
Toxicity to daphnia and other aquatic invertebrates.

LC50 - Daphnia magna (Water flea) - 21,531 mg/l - 48 h

12.2 Persistence and degradability
no data available

12.3 Bioaccumulative potential
no data available

12.4 Mobility in soil
no data available

12.5 Results of PBT and vPvB assessment
no data available

12.6 Other adverse effects
no data available
13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number
ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

14.3 Transport hazard class(es)
ADR/RID: - IMDG: - IATA: -

14.4 Packaging group
ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards
ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user
no data available

15. REGULATORY INFORMATION

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

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
no data available

15.2 Chemical Safety Assessment
no data available

16. OTHER INFORMATION

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 this document is based on the resent 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.