

SAFETY DATA SHEET

Creation Date 14-May-2010

Revision Date 19-Dec-2025

Revision Number 7

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

1. Identification

Product Name Chromium(III) chloride, anhydrous

Cat No. : AC190470000; AC190470050; AC190470250; AC190471000

CAS No 10025-73-7

Synonyms Chromic chloride

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99
CHEMTREC Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous according to [US] OSHA (29 CFR 1910.1200, 2024)

| | |
|---------------------|------------|
| Corrosive to metals | Category 1 |
| Acute oral toxicity | Category 4 |
| Skin Sensitization | Category 1 |

Label Elements

Signal Word

Warning

Hazard Statements

May be corrosive to metals
Harmful if swallowed
May cause an allergic skin reaction

**Precautionary Statements****Prevention**

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Keep only in original packaging

Skin

IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Spills

Absorb spillage to prevent material damage

Storage

Store in corrosive resistant polypropylene container with a resistant inliner

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Toxic to aquatic life with long lasting effects

Hazards classified under paragraph (d)(1)(ii) of 1910.1200

No information available

3. Composition/information on Ingredients

| Component | CAS No | Weight % |
|------------------|------------|----------|
| Chromic chloride | 10025-73-7 | >95 |

4. First-aid measures

| | |
|------------------------------------|---|
| General Advice | If symptoms persist, call a physician. |
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. |
| Inhalation | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur. |
| Most important symptoms and | None reasonably foreseeable. May cause allergic skin reaction. Ingestion causes severe |

| | |
|---------------------------|---|
| effects | swelling, severe damage to the delicate tissue and danger of perforation: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing |
| Notes to Physician | Treat symptomatically |

5. Fire-fighting measures

| | |
|---|---|
| Suitable Extinguishing Media | Carbon dioxide (CO ₂). Dry chemical. Chemical foam. |
| Unsuitable Extinguishing Media | No information available |
| Flash Point | No information available |
| Method - | No information available |
| Autoignition Temperature | No information available |
| Explosion Limits | |
| Upper | No data available |
| Lower | No data available |
| Sensitivity to Mechanical Impact | No information available |
| Sensitivity to Static Discharge | No information available |

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Hydrogen chloride gas.

Protective Equipment and Precautions for Firefighters

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

NFPA

Health
2

Flammability
0

Instability
1

Physical hazards
N/A

6. Accidental release measures

| | |
|---|--|
| Personal Precautions | Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. |
| Environmental Precautions | Do not flush into surface water or sanitary sewer system. |
| Methods for Containment and Clean Up | Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal. |

7. Handling and Storage

| | |
|-----------------|--|
| Handling | Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid dust formation. |
| Storage. | Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place. Store under an inert atmosphere. Air sensitive. Incompatible Materials. Strong oxidizing agents. |

8. Exposure controls / personal protection

Exposure Guidelines

| Component | ACGIH TLV | OSHA PEL | NIOSH | Mexico OEL (TWA) |
|------------------|-----------|--------------------------------------|---|----------------------------|
| Chromic chloride | | (Vacated) TWA: 0.5 mg/m ³ | IDLH: 25 mg/m ³ REL = 0.5 mg/m ³ (TWA) | TWA: 0.5 mg/m ³ |

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection 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 and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection 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 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended Filter type: Particulates filter conforming to EN 143.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical propertiesAppearance**Physical State****Color****Odor****Odor Threshold**Property**Melting Point/Range****Softening Point****Boiling Point/Range****Flash Point****Flammability (liquid)****Flammability (solid,gas)****Explosion Limits****Autoignition Temperature****Decomposition Temperature****pH****Viscosity****Water Solubility****Solubility in other solvents****Partition Coefficient (n-octanol/water)****Component**

Chromic chloride

Vapor Pressure**Density / Specific Gravity****Bulk Density****Vapor Density****Particle characteristics**Other Information**Molecular Formula**

Powder Solid

Purple

Odorless

No information available

Values

1152 °C / 2105.6 °F

No data available

No information available

No information available

Not applicable

No information available

No data available

No data available

No data available

No information available 2.4 @ 20°C (0.2M)

Not applicable

Soluble 585 g/L @ 25 °C

No information available

log Pow

-3

No information available

2.8

No data available

Not applicable

No data available

Remarks• Method**Method -** No information available
Solid

Solid

Molecular Weight 158.36
Evaporation Rate Not applicable - Solid

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Hygroscopic.

Conditions to Avoid Incompatible products. Exposure to moisture. Exposure to moist air or water.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Hydrogen chloride gas

Hazardous Polymerization No information available.

Hazardous Reactions None under normal processing.

11. Toxicological information

Information on expected route of exposure

Inhalation May produce an allergic reaction. Avoid breathing dust or spray mist. May be harmful if inhaled.

Ingestion May cause allergic reaction. May be harmful if swallowed.

Eyes Avoid contact with eyes. Sensitization.

Skin Avoid contact with skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Toxicology data for the components

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|------------------|------------------------|-------------------------|------------------------------------|
| Chromic chloride | LD50 = 440 mg/kg (Rat) | LD50 > 2000 mg/kg (Rat) | 31.5 mg/m ³ /2h (Mouse) |

Toxicologically Synergistic Products No information available

(b) skin corrosion/irritation; Based on available data, the classification criteria are not met
Test method OECD 404
Test species rabbit
Observational endpoint No skin irritation

(c) serious eye damage/irritation; Based on available data, the classification criteria are not met
Test method OECD 405
Test species rabbit
Observation end point No eye irritation

(d) respiratory or skin sensitization;
Respiratory No data available
Skin Category 1

| Component | Test method | Test species | Study result |
|---------------------------------------|------------------------------------|--------------|---------------|
| Chromic chloride 10025-73-7 (>95) | in vivo OECD Test Guideline 406 | guinea pig | Sensitization |

No information available

(e) germ cell mutagenicity; Based on available data, the classification criteria are not met

| Component | Test method | Test species | Study result |
|--|-------------------------|--------------|--------------|
| Chromic chloride 10025-73-7 (>95) | OECD Test Guideline 473 | in vitro | negative |

(f) carcinogenicity; Based on available data, the classification criteria are not met

| Component | Test method | Test species / Duration | Study result |
|--|-------------|-------------------------|--------------|
| Chromic chloride 10025-73-7 (>95) | in vivo | Rat | negative |

The table below indicates whether each agency has listed any ingredient as a carcinogen

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|------------------|------------|------------|------------|------------|------------|------------|
| Chromic chloride | 10025-73-7 | Not listed | Not listed | Not listed | Not listed | Not listed |

(g) reproductive toxicity; Based on available data, the classification criteria are not met

| Component | Test method | Test species / Duration | Study result |
|--|-------------------------|-------------------------|--------------|
| Chromic chloride 10025-73-7 (>95) | OECD Test Guideline 414 | mouse 17 days | negative |

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs None known.

(j) aspiration hazard; Not applicable
Solid

Other Adverse Effects The toxicological properties have not been fully investigated.

Symptoms / effects, both acute and delayed Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.

Other Adverse Effects The toxicological properties have not been fully investigated.

Endocrine Disrupting Properties This product does not contain any known or suspected endocrine disruptors.

12. Ecological information

Ecotoxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|------------------|--|---|-----------------|---|
| Chromic chloride | EC50 = 2 mg/L (96h) Selenastrum capricornutum | LD50 = 57.4 mg/L (96h) Rainbow trout EC10 = 0.246 mg/L Salmo gairdneri | EC50 = 256 mg/L | LC50 = 63.3 mg/L (48h) Daphnia magna |

Persistence and Degradability May persist based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

| Component | log Pow |
|------------------|---------|
| Chromic chloride | -3 |

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No UN3260
 Proper Shipping Name Corrosive solid, acidic, inorganic, n.o.s.
 Technical Shipping Name Chromium(III) chloride
 Hazard Class 8
 Packing Group III

TDG

UN-No UN3260
 Proper Shipping Name Corrosive solid, acidic, inorganic, n.o.s.
 Technical Shipping Name Chromium(III) chloride
 Hazard Class 8
 Packing Group III

IATA

UN-No UN3260
 Proper Shipping Name Corrosive solid, acidic, inorganic, n.o.s.
 Technical Shipping Name Chromium(III) chloride
 Hazard Class 8
 Packing Group III

IMDG/IMO

UN-No UN3260
 Proper Shipping Name Corrosive solid, acidic, inorganic, n.o.s.
 Technical Shipping Name Chromium(III) chloride
 Hazard Class 8
 Packing Group III

15. Regulatory Information

United States of America Inventory

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|------------------|------------|------|---|-----------------------------|
| Chromic chloride | 10025-73-7 | X | ACTIVE | - |

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

-/- - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

International Inventories

Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|------------------|------------|-----|------|-----------|-------|------|------|------|-------|----------|
| Chromic chloride | 10025-73-7 | X | - | 233-038-3 | X | X | X | X | X | KE-06017 |

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Component | CAS No | Weight % | SARA 313 - Threshold Values % | SARA 313 - Reporting thresholds |
|------------------|------------|----------|-------------------------------|---------------------------------|
| Chromic chloride | 10025-73-7 | >95 | 1.0 % | - |

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|------------------|----------------------------|-----------------------------|------------------------|---------------------------|
| Chromic chloride | - | - | X | - |

Clean Air Act

| Component | HAPS Data | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|------------------|-----------|-------------------------|-------------------------|
| Chromic chloride | X | | - |

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

| Component | Hazardous Substances RQs | CERCLA Extremely Hazardous Substances RQs | SARA Reportable Quantity (RQ) |
|------------------|--------------------------|---|-------------------------------|
| Chromic chloride | - | 1 lb | - |

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|------------------|---------------|------------|--------------|----------|--------------|
| Chromic chloride | X | X | X | X | X |

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

Not applicable

| Component | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|------------------|------------|---|---|---|
| Chromic chloride | 10025-73-7 | - | - | - |

Safety, health and environmental regulations/legislation specific for the substance or mixture

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|------------------|------------|----------------|------------------------------|---------------------------|--|
| Chromic chloride | 10025-73-7 | Not applicable | Not applicable | Not applicable | Not applicable |

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Other International Regulations

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|------------------|------------|---|--|----------------------------|------------------------------------|
| Chromic chloride | 10025-73-7 | Not applicable | Not applicable | Not applicable | Not applicable |

16. Other Information

Prepared By

Product stewardship (Regulatory Affairs)
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19-Dec-2025

Revision Summary

Updated to the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200, 2024), May 20, 2024, effective July 19, 2024.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS