

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name Chromium(III) chloride hexahydrate

CAS number 10060-12-5

Synonyms Chromic chloride hexahydrate

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Laboratory Chemicals

1.3 Details of the supplier of the safety data sheet

Company Lab Alley, LLC
12501 Pauls Valley Road
Austin, Texas 78737
U.S.A.

Telephone 512-668-9918

Fax 512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

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

2.2 GHS Label elements, including precautionary statements

Pictogram



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 container.

Skin:

IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing 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 liner.

Disposal:

Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Toxic to aquatic life with long lasting effects.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
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Chromium (III) Chloride Hexahydrate	-	10060-12-5	>95%
Chromic Chloride	-	10025-73-7	-

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice	If symptoms persist, call a physician.
If inhaled	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
If swallowed	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

May cause allergic skin reaction. 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.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media CO 2, dry chemical, dry sand, alcohol-resistant foam.

Unsuitable extinguishing media No information available.

5.2 Specific hazards arising from the substance or mixture

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

5.3 Special 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.

5.4 Further information

Flash Point 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.

NFPA

Health	Flammability	Instability	Physical hazards
2	0	1	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

See section 8 for personal protective equipment. See section 13 for proper disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Ensure adequate ventilation. Avoid ingestion and inhalation.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Store under an inert atmosphere. Protect from moisture.

Incompatibilities

Strong oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Chromium (III) Chloride Hexahydrate	TWA	0.5 mg/m3
Chromic chloride	TWA	0.5 mg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
Chromium (III) Chloride Hexahydrate	N/A	N/A
Chromic chloride	N/A	N/A

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Chromium (III) Chloride Hexahydrate	IDLH	25 mg/m3
	TWA	0.5 mg/m3
Chromic chloride	IDLH	25 mg/m3
	TWA	0.5 mg/m3

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Use only under a chemical fume hood. 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 protection

Wear appropriate protective gloves to prevent skin exposure.

Body Protection

Wear appropriate protective 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.

Control of environmental exposure

Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Solid
Appearance	Dark green
Odor	Odorless
Odor Threshold	No information available
pH	2-3 (5% aq.sol)
Melting Point/Range	83 °C / 181.4 °F
Boiling Point/Range	No information available
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	No information available
Lower	No information available
Vapor Pressure	No information available
Vapor Density	No information available
Density	No information available
Solubility	Soluble in water.
Partition coefficient; n-octanol/water	No information available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	CrCl ₃ ·6H ₂ O
Molecular Weight	266.45
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

None known, based on information available.

10.2 Chemical stability

Hygroscopic.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Incompatible products. Excess heat. Avoid dust formation. Exposure to moist air or water.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Hydrogen chloride gas.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Chromium (III) Chloride Hexahydrate	1790 mg/kg (Rat)	>2000 mg/kg (Rat)	-
Chromic chloride	440 mg/kg (Rat)	-	31.5 mg/m ³ /2h (Mouse)

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

No information available.

Respiratory or skin sensitization

May cause sensitization by skin contact.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Chromium (III) Chloride Hexahydrate	10060-12-5	Not listed	Not listed	Not listed	Not listed	Not listed
Chromic chloride	10025-73-7	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

The toxicological properties have not been fully investigated.

SECTION 12: Ecological information**12.1 Toxicity**

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.

Chromium (III) Chloride Hexahydrate: Water Flea EC50: 187 mg/L/24h

12.2 Persistence and degradability

Soluble in water. Persistence is unlikely based on information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

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

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 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.

SECTION 14: Transport information

DOT (US)

UN Number	UN3260
Proper Shipping name	Corrosive solid, acidic, inorganic, n.o.s.
Hazard Class	8
Packaging Group	III
Technical name	Chromium (III) Chloride Hexahydrate ,Chromic chloride

IMDG

UN Number	UN3260
Proper Shipping name	Corrosive solid, acidic, inorganic, n.o.s.
Hazard Class	8
Packaging Group	III
Technical name	Chromium (III) Chloride Hexahydrate ,Chromic chloride

IATA

UN Number	UN3260
Proper Shipping name	Corrosive solid, acidic, inorganic, n.o.s.
Hazard Class	8
Packaging Group	III
Technical name	Chromium (III) Chloride Hexahydrate ,Chromic chloride

SECTION 15: Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)

Chromic chloride - 1 lb RQ

SARA 304 Emergency release notification

Chromic chloride - 1 lb RQ

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Chromic chloride - 1/10,000 RQ

SARA 311/312 Hazardous

See section 2 for hazard classifications.

SARA 313 (TRI reporting)

Chromium (III) Chloride Hexahydrate: Threshold = 1.0%

Chromic chloride: Threshold = 1.0%

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Chromium (III) Chloride Hexahydrate: Listed

Chromic chloride: Listed

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not listed.

Safe Drinking Water Act

Chromium (III) Chloride Hexahydrate: Listed Toxic Pollutant

Chromic chloride: Listed Toxic Pollutant

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

US state regulations

US. Massachusetts RTK - Substance List

Chromium (III) Chloride Hexahydrate: Not listed

Chromic chloride: Listed

US. New Jersey Worker and Community Right-to-Know Act

Chromium (III) Chloride Hexahydrate: Listed

Chromic chloride: Listed

US. Pennsylvania Worker and Community Right-to-Know Law

Chromium (III) Chloride Hexahydrate: Listed

Chromic chloride: Listed

California Proposition 65

This product does not contain any Proposition 65 chemicals.

SECTION 16: Other information

Date of Issue: 6/10/2025

SECTION 17: Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.