

15117 Washington Highway
P. O. Box 1055 Ashland VA

Phone: (804) 227-3381
Fax: (804) 227-3404

CHEMTREC: (800) 424-9300
Poison Center: (800) 562-8236

Safety Data Sheet

Section 1: Product and Company Information

Product Name: Chromium
Company: Fine Metals Corporation
15117 Washington Hwy
Ashland, VA 23005

For more information call: 1-804-227-3381
(Monday - Friday 9-4:30)

In case of emergency: Transportation (Chemtrec) 1-800-424-9300
Poison Center: 1-800-562-8236
(24 hours/day, 7 days/week)

Section 2: HAZARD IDENTIFICATION

This material is not considered hazardous and is not classified under GHS

Emergency Overview

Emergency Negligible fire or explosion hazard in bulk form. Powdered material may form explosive dust-air mixtures.

Hazard Statements: None

Precautionary Statements:

Prevention: Practice good industrial hygiene.
Response: Wash hands after handling.

Appearance/Form:

Form: Solid
Color: Silver grey metal
Odor: None

Hazard Summary: May burn with an invisible flame. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Dust can be an explosion hazard when exposed to heat or flame. Finely divided dusts may exhibit pyrophoric tendencies.

Acute Health Effects

Skin: Can cause skin irritation.
Eyes: Can cause eye irritation. May cause conjunctivitis
Ingestion: May cause irritation of the digestive tract.
Inhalation: Inhalation of fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count. May cause asthma and shortness of breath. May cause headache, coughing, fever, weight loss, and pneumoconiosis. Causes respiratory tract irritation.

Chronic Exposure: Prolonged and/or repeated contact may cause irritation and/or dermatitis. May cause skin sensitization, an allergic reaction, which becomes evident upon reexposure to this material. May cause liver damage. Prolonged inhalation may cause respiratory tract inflammation and lung damage.

Aggravated Medical Conditions: May aggravate respiratory conditions.

Carcinogenicity: Chromium is a confirmed human carcinogen with experimental tumorigenic data.

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Section 3: Composition/Information on Ingredients

Chemical Name	CAS-No.		Reach #	
Chromium	7440-47-3	Not available	231-157-5	>99 wt%

Section 4: FIRST AID MEASURES

- Eye Contact: Flush with plenty of water for at least 15 minutes, lifting upper and lower eyelids. Seek medical attention if symptoms
- Skin Contact: Remove contaminated clothing, brush material off skin, wash affected area with mild soap and water. Seek medical attention if symptoms persist.
- Inhalation: Remove to fresh air. Keep warm and quiet, give oxygen if breathing is difficult and seek medical attention.
- Ingestion: Get medical attention. Wash out mouth with water. Give 1-2 glasses of milk or water. Seek medical attention immediately. Do not induce vomiting or give anything by mouth to an unconscious person.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing Media: Use a Class D dry powder extinguisher, Earth or sand, dry ground dolomite, graphite.

Unsuitable extinguishing media: Do not use water.

Specific hazards during firefighting: Dusts at sufficient concentrations can form explosive mixtures with air. May form toxic metal fumes.

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

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate respiratory and protective equipment. Take care not to raise dust. Use non-sparking tools.

Environmental Precautions: This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.

Methods for Cleaning Up: Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Eliminate all ignition sources if safe to do so. Avoid formation of dust. Provide appropriate exhaust ventilation where dust is formed. Avoid breathing (dust, vapor, mist, gas). Practice good chemical hygiene during and after use. Avoid release to the environment.

Section 7: HANDLING AND STORAGE

Handling: Wash thoroughly after handling. Do not get in eyes, on skin or on clothing. Do not breathe dust, vapor, mist or gas. Chromium must be stored to avoid contact with strong oxidizers (such as chlorine, bromine, and fluorine) and acids since violent reactions occur. Sources of ignition such as smoking and open flames are prohibited where chromium is used, handled, or stored in a manner that could create a potential fire or explosion hazard.

Storage: Keep container closed when not in use. Store in a cool dry place.

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Controls: Use process enclosures, local exhaust ventilation or other means to maintain employee exposure as far below limits as possible

Component Exposure Limits

Component	Location	Value
Chromium	US ACGIH TLV TWA	0.5
	US OSHA OEL TWA	1
	US NIOSH REL TWA	0.5
	Canada- AB,BC, ON, PQ	0.5
	Europe TWA	0.5
	Hungary TWA	2

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0.5

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Respiratory Protection: Not normally needed. If ventilation is inadequate and this material is handled at elevated temperatures or dusts/fumes/mists are generated NIOSH/MSHA approved air purifying respirator may be permissible.

Eye/Face: Wear safety glasses or goggles as appropriate to the task performed.

Skin Protection: Sufficient to protect skin from contact

Work Hygienic Practices: Practice good chemical hygiene during and after use.

Comments: None

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Odor: None

Color: Lusterous grey

Melting Point: 1857° C

Boiling Point: 2672° C

Vapor Pressure: 1 mm at 1616° C

Vapor Density (air = 1): N/A

Evaporation Rate: N/A

Solubility In Water: Insoluble

Specific Gravity (water = 1): 7.19

Atomic Weight: 52

% Volatility By Volume: Not available.

Density: 7.14

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal temperatures and pressures.

Incompatible Materials: Strong Acids, strong bases, oxidizing materials.

Hazardous Decomposition Products: Toxic chromium oxide fumes.

Possibility of Hazardous Reactions: Not available.

Section 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: Harmful if swallowed, inhaled or absorbed through skin. Human poison by ingestion with gastrointestinal effects.

Chronic Toxicity: Prolonged exposure can cause damage to the liver and kidneys, stomach pains, vomiting and diarrhea.

Reproductive Toxicity: No known effect.

Mutagenicity: Not regulated

Carcinogenicity: An experimental tumorigen and suspected carcinogen.

Other: None

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: EPA - Maximum Contaminant Level Goals MCLG: 0.1 ppm Maximum Contaminant Level MCL: 0.1 ppm 96-hour LC50: 14.3 mg/L (Cyprinus carpio) 48-Hour EC50: .07 mg/L (Daphnia magna)

Persistence/Degradability: When released to land, chromium compounds bind to soil and are not likely to migrate to ground water. They are very persistent in water as sediments.

Bioaccumulation/Accumulation: There is a high potential for accumulation of chromium in aquatic life.

Mobility in Environment: Low mobility due to low solubility.

Section 13: DISPOSAL CONSIDERATIONS

Waste Classification: Recycle if possible.

All disposal activities must comply with federal, state, provincial and local regulations.

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Section 14: TRANSPORT INFORMATION

US DOT (ground): Not regulated
ICAO/IATA (air): Not regulated
IMO/IMDG (water): Not regulated
Special Provisions: None

Section 15: REGULATORY INFORMATION

UNITED STATES

SARA Title III (Superfund Amendments and Reauthorization Act) 313 Reportable Ingredients: No

TSCA (Toxic Substance Control Act) status: Not regulated.

STATE REGULATIONS

The following components appear in one or more of the following states hazardous substances

Component	CAS #	CA	MA	MN	NJ
Chromium	7440-47-3	Yes	Yes	Yes	Yes

California Proposition 65: This product is not known to contain any components for which the State of California has found to cause cancer, birth defects or other reproductive harm.

CANADA

WHMIS (Workplace Hazardous Materials Information System): Not regulated.

Domestic Substance List (Inventory): All components of this product are included in inventory, exempt, or notified.

GENERAL COMMENTS

None

Section 16: OTHER INFORMATION

Information Contact: sds@finemetalscorp.com

Issue Date: 7/3/1999

Revision Date: 1/1/2015

HMIS®(H)	NFPA
Health: 2	
Flammability: 1	1
Reactivity: 0	2 0
PPE: E	

Ratings range from 0 (no hazard) to 4 (severe hazard)

The information contained in this SDS is believed to be correct, but is not all inclusive and shall be used only as a guide. Fine Metals Corporation shall not be liable for any damage resulting from handling or from contact with the product listed in the SDS. Any comments or questions should be directed to:

Safety Manager
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15117 Washington Highway
P O Box 1055
Ashland VA 23005
(804) 227-3381