

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: Iron
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 Not considered hazardous.

Hazard Statements: Not a hazardous substance or mixture.

Precautionary Statements:

Prevention: None.

Response: None.

Appearance/Form:

Form: Solid metal

Color: Black to grey

Odor: None

Hazard Summary: This substance is not considered hazardous in the form supplied. Material is non-combustible except in very fine particle form, however, dusts at sufficient concentrations can form explosive mixtures with air. Combustion generates toxic fumes. Can react with water to liberate flammable hydrogen gas.

Acute Health Effects

Skin: May cause skin irritation

Eyes: May cause eye irritation.

Ingestion: Low ingestion hazard in normal use.

Inhalation: May cause respiratory irritation.

Chronic Exposure: Chronic exposure to fumes or dust may lead to liver and lung damage. Repeated exposure to fumes or dust may cause pancreatic damage, diabetes, and cardiac abnormalities. 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 lung damage.

Aggravated Medical Conditions: None expected.

Conditions:

Carcinogenicity: Not listed as a carcinogen by IARC, ACGIH, NIOSH, NTP or OSHA.

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Section 3: Composition/Information on Ingredients

Chemical Name	CAS-No.		Reach #	
Iron	7439-89-6	Not available	231-096-4	>99 wt%

Section 4: FIRST AID MEASURES

Eye Contact: Rinse eyes with water for at least 15 minutes. Seek medical attention.
Skin Contact: Wash with soap and water. If irritation occurs seek medical attention.
Inhalation: Remove to fresh air. If difficulty breathing seek medical attention.
Ingestion: If powder is ingested seek medical attention. Treat symptomatically and supportively.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing Media: Graphite powder, soda ash, powdered sodium chloride, or an appropriate metal-fire extinguishing dry powder.
Unsuitable extinguishing media: Do not use water.
Specific hazards during firefighting: May form toxic metal fumes. Dusts at sufficient concentrations can form explosive mixtures with air.

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 personal protective equipment. Avoid dust formation.
Environmental Precautions: Avoid release to the environment.
Methods for Cleaning Up: Sweep up or absorb material, then place into a suitable clean, dry closed container for disposal. Avoid formation of dust. 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. Use with adequate ventilation. Avoid contact with clothing. Avoid ingestion and inhalation. Practice good chemical hygiene.
Storage: Store away from incompatible materials in a cool, dry, well-ventilated area.

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
Iron	No occupation	
	exposure limit values	

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 dust/fumes/mists are generated a NIOSH/MSHA approved air purifying respirator with a manufacturers approved cartridge or canister may be permissible under certain circumstances.

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

Skin Protection: Wear protective gloves.

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

Comments: There are no established workplace exposure limits for components of the product.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

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Odor: None

Color: Grey

Melting Point: 1538° C

Boiling Point: 2750° C - 2862° C

Vapor Pressure: Not applicable

Vapor Density (air = 1): Not applicable

Evaporation Rate: Not applicable

Solubility In Water: Insoluble

Specific Gravity (water = 1): 7.8

Atomic Weight: 55.845

% Volatility By Volume: No data available

Density: 7.874 at 25°C

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal conditions and usage.

Incompatible Materials: Strong acids, Oxidizing materials, Halogens, Ammonium Nitrate, Phosphorus

Hazardous Decomposition Products: Toxic metal fumes

Products:

Possibility of Hazardous Reactions: No data available

Reactions:

Section 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: LD50 (oral, rat) = 30 gm/kg. (LD50: Lethal dose 50. Single dose of a substance that causes the death of 50% of an animal population from exposure to the substance by any route other than inhalation. Usually expressed as milligrams or grams of material per kilogram of animal weight (mg/kg or g/kg).)

Chronic Toxicity: Chronic inhalation of excessive concentrations of iron oxide fumes or dusts may result in development of a benign pneumoconiosis, called siderosis, which is observable as an x-ray change. No physical impairment of lung function has been associated with siderosis. Inhalation of excessive concentrations of iron oxide may enhance the risk of lung cancer development in workers exposed to pulmonary carcinogens.

Reproductive Toxicity: No known effect.

Mutagenicity: No known effect.

Carcinogenicity: No known effect.

Other: NA

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Aquatic toxicity (Acute) - 96 hour LC50: .56 mg/L (Cyprinus carpio). Based on aesthetic issues, EPA has issued a Secondary Maximum Contaminant Level (SMCL) of 0.3 mg/L for source water iron. (Note: EPA does not enforce SMCLs. They are used as guidelines to assist public water utilities in managing their drinking water for aesthetic considerations.)

Persistence/Degradability: No information available.

Bioaccumulation/Accumulation: 14 Day Bioconcentration Factor (BCF) = 1000 (Panaeus aztecus)

Mobility in Environment: Iron makes up about five percent of the earth's crust. It can be a soluble or relatively insoluble form found in water.

Section 13: DISPOSAL CONSIDERATIONS

Waste Classification: Material may be recyclable.

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

Section 14: TRANSPORT INFORMATION

US DOT (ground): Not regulated

ICAO/IATA (air): Not regulated

IMO/IMDG (water): Not regulated

Special Provisions: Not regulated

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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
Iron	7439-89-6	No	No	Yes	No

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

NA

Section 16: OTHER INFORMATION

Information Contact: sds@finemetalscorp.com

Issue Date: 7/6/1999

Revision Date: 1/1/2015

HMIS®(II)		NFPA	
Health:	0		
Flammability:	0	0	
Reactivity:	0	0	0
PPE:	B		

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
Fine Metals Corporation
15117 Washington Highway
P O Box 1055
Ashland VA 23005
(804) 227-3381