

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: Aluminum

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 In the solid form this material is not generally considered hazardous. However, if your process involves grinding, melting, welding, cutting or any other process that causes a release of dust or fume it may be hazardous. Routes include eye, skin and ingestion.

Hazard Statements: None.

#### Precautionary Statements:

Prevention: None.

Response: None.

#### Appearance/Form:

Form: Solid

Color: Light silvery-white

Odor: None

Hazard Summary: Not considered a hazard as sold. Dust may be fire or explosion hazard if concentrations are high enough.

#### Acute Health Effects

Skin: May cause skin irritation.

Eyes: Dust and fumes from processing can cause irritation

Ingestion: Low ingestion hazard in normal use.

Inhalation: May be harmful if inhaled. May cause respiratory irritation.

**Chronic Exposure:** Aluminum dust/fines and fumes are a low health risk by inhalation. May cause upper respiratory tract irritation. Aluminum dust should be treated as a nuisance dust as defined by the ACGIH. Long term exposure to high levels of aluminum dusts may lead to pulmonary function impairment, dermatitis, eczema and may cause liver and kidney damage.

**Aggravated Medical Conditions:** Dust and fume from processing may aggravate: Asthma, chronic pulmonary disease and skin rashes.

#### Carcinogenicity:

Not listed as a human carcinogen.

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## Section 3: Composition/Information on Ingredients

Chemical Name	CAS-No.	Reach #		
Aluminum	7429-90-5	Not available	231-072-3	>99 wt%

## Section 4: FIRST AID MEASURES

Eye Contact: Immediately flush with water for at least 15 minutes. Call a physician if irritation persists.  
Skin Contact: Wash contaminated area with plenty of water. Call a physician if irritation develops or persists  
Inhalation: Remove to fresh air; if breathing becomes difficult, give oxygen. Call a physician  
Ingestion: Obtain immediate medical attention. Low ingestion hazard in normal use.

## Section 5: FIRE FIGHTING MEASURES

**Suitable extinguishing Media:** Use Class D extinguishing agents, dry sand or sodium chloride on fire.

**Unsuitable extinguishing media:** Do not use water, carbon dioxide, graphite or halogenated extinguishing agents.

**Specific hazards during firefighting:** Dusts at sufficient concentrations can form explosive mixtures with air. Chips, fines and dust in contact with water

can generate flammable/explosive hydrogen gas. Moisture combined with molten metal can be explosive.

**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. Remove containers from fire area if without risk.

## Section 6: ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Practice good chemical hygiene. Avoid contact with skin and eyes.

**Environmental Precautions:** Do not release to environment.

**Methods for Cleaning Up:** Do not create dust. Mix with sand and put into approved drums. Collect scrap for recycling.

## Section 7: HANDLING AND STORAGE

**Handling:** Wash thoroughly after using, particularly before eating or smoking. Avoid breathing dust or fumes. Do not ingest. Avoid formation of dust. Hot and cold aluminum are not visually different. Hot aluminum does not glow red.

**Storage:** Store in cool dry area away from incompatibles. Keep containers tightly closed when not in use.

## 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
Aluminum	ACGIH TWA (Total)	10
	ACGIH TWA (Respirable)	5
	ACGIH TLV-TWA	1
	NIOSH REL TWA (Total)	10
	NIOSH REL TWA	5
	OSHA OEL TWA (Total)	15
	OSHA OEL TWA	5
	Europe TWA (Inhalable)	10
	Europe TWA (Respirable)	5
Denmark TWA (Inhalable)	10	

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Denmark TWA (Respirable)	2
Germany TWA (Inhalable)	4
Germany TWA (Respirable)	1.5
Australia, NZ, Singapore	10
UK WEL TWA (Inhalable)	10
UK WEL TWA (Respirable)	4

**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:** Lab coat, apron, coveralls or other protective clothing.

**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:** Silvery grey

**Melting Point:** 1220° F (660° C)

**Boiling Point:** 2327-2476° C

**Vapor Pressure:** 1 mm at 1284° C

**Vapor Density (air = 1):** Not applicable

**Evaporation Rate:** Not applicable

**Solubility In Water:** Insoluble

**Specific Gravity (water = 1):** 2.70

**Atomic Weight:** 26.98

**% Volatility By Volume:** No information available

**Density:** 2.70 g/cm<sup>3</sup>

## Section 10: STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions of use, storage, and transportation.

**Incompatible Materials:** Oxidizing agents, Strong Acids, Mercury, Strong Bases, Halocarbons and Halogens. Powder is incompatible with water.

**Hazardous Decomposition Products:** Oxides of aluminum. Reacts with acids and some caustic solutions to form hydrogen.

**Products:**

**Possibility of Hazardous Reactions:** No information available

**Reactions:**

## Section 11: TOXICOLOGICAL INFORMATION

**Acute Toxicity:** Dermal LD50 - not available Oral LD50 - Not available Inhalation LC50 - Not available. Acute overexposures to fumes can cause the accumulation of fluid in the lungs and reduced ability of the blood to carry oxygen. These effects can be delayed up to 1-2 weeks.

**Chronic Toxicity:** Aluminum may be implicated in Alzheimers disease. Inhalation of aluminum containing dusts may cause pulmonary disease. Long term exposure to high levels of aluminum dusts may lead to pulmonary function impairment, dermatitis, eczema and may cause liver and kidney damage.

**Reproductive Toxicity:** No information available.

**Mutagenicity:** No known effect.

**Carcinogenicity:** Not listed by IARC, NTP or OSHA

**Other:** None available

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## Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** 96 hour LC50: .120 mg/L (Oncorhynchus mykiss). Aluminum is only sparingly soluble in water between pH 6 and 8; thus aluminum concentration in most natural waters is extremely low.

**Persistence/Degradability:** Aluminum cannot be destroyed in the environment. It can only change its form or become attached to or separated from particles.

**Bioaccumulation/Accumulation:** 56 day Bioconcentration Factor (BCF) = 36 (Salvelinus fontinalis)

**Mobility in Environment:** Not available

## 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:** 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		
Aluminum	7429-90-5	No	Yes	No	Yes	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

All components of this product are included in inventory, exempt, or notified: USA TSCA, Philippines PICCS, Korean KECL, European EINECS, Canadian DSL

## Section 16: OTHER INFORMATION

**Information Contact:** sds@finemetalscorp.com

**Issue Date:** 6/1/1996

**Revision Date:** 1/1/2015

# Safety Data Sheet

HMIS® (11)		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

