

Safety Data Sheet

Section 1: Chemical Product and Company Identification

Material Name:	Aluminum, Aluminum Alloy
Recommended use:	Fabricated parts
Manufacturer Information:	Falco LLC 1350 S. 56 th Street Chandler, AZ 85226
Emergency contact	1-855-769-3200
SDS ID:	Falco-1
Revision:	1
Dated:	3/11/22

For current SDS see www.falcoext.com

Section 2: Hazards Identification

General Hazard Statement:

Solid metallic products are generally non-hazardous. However, some hazardous elements contained in these products can be emitted under certain processing conditions such as but not limited to: burning, melting, cutting, sawing, brazing, grinding, machining, milling and welding. Products in the solid state present no fire or explosion hazard. Small chips, fines and dust may ignite readily. The following classification information is for the hazardous elements which may be released during processing.

Personal Protective equipment:

- Gloves, Protective clothing, eye/face protection
- Do not touch hot material, may cause severe thermal burns.
- Fire fighters should wear full protective clothing and self-contained breathing apparatus.

Potential Health Effects:

- Eyes – Dust, fumes or powder may irritate eye tissue.
- Skin - May cause allergic skin reaction.
- Ingestion – Large amounts of dust or particles may cause irritation, nausea, and diarrhea.
- Inhalation – May cause allergy or asthma symptoms or breathing difficulties if inhaled.

GHS Classification: (0=minimal, 4=severe)

- Flammable Solid – 0
- Flammable Dust – 1
- Eye Irritation – 1
- Skin Irritant – 1
- Respiratory Irritation - 1



Explosive



Irritant



Respiratory
Sensitizer

Section 3: Composition / Information on Ingredients

Component	Percent	CAS #	OSHA TWA mg/m ³	NIOSH TWA mg/m ³	ACGIH TWA mg/m ³
Aluminum	> 80%	7429-90-5	15 *	10 *	1
Silicon	< 1%	7440-21-3	15 *	10 *	-
Iron	< 1%	7439-89-6	10 (fume)	5	5
Copper	< 7%	7440-50-8	0.1 (fume) 1 (dust)	0.1 (fume) 1 (dust)	0.2 (fume) 1 (dust)
Manganese	< 1.5%	7439-96-5	5	1	0.2
Magnesium	< 5%	1309-48-4	15	-	10
Chromium	< 0.5%	7440-47-3	0.5	0.5	0.5
Zinc	< 7.5%	1314-13-2	5	5	2
Titanium	< 0.25%	7440-32-6	15	-	10
Vanadium	< 0.25%	1314-62-1	-	-	0.05
Zirconium	< 0.20 %	7440-67-7	5	5	5
Coating Oil (Protectsol 512)	< 1%	64742-88-7 64742-65-0 93820-55-4	-	-	-

* Respirable fraction 5 mg/m³

Section 4: First Aid Measures

Eye contact:

Flush with water for at least 20 minutes holding eyelids open. Do not rub eyes. Seek medical attention if irritation develops

Skin Contact:

Flush with water. Seek medical attention if irritation develops. Contaminated clothing to be washed before reuse.

Inhalation:

Remove exposed person to fresh air. If breathing is difficult, oxygen may be administered. If breathing has stopped, artificial respiration should be started immediately. Seek medical attention.

Ingestion:

If large amounts of product are ingested, do not induce vomiting. Rinse mouth with water. Seek medical attention and advise physician

Section 5: Fire Fighting Measures

General Fire Hazards:

High concentrations of airborne dust may form explosive mixture with air. Coating oils present on product may be ignited by open flame

Extinguishing Media:

Use class D extinguisher on dust, fines or molten metal. Dry sand for molten metal.

Unsuitable Extinguishing Media:

Do not use halogenated agents on small chips, dust or fines. Do not use water on molten metal.

Fire Fighting Equipment/Instructions:

Wear a self-contained positive pressure breathing apparatus and full protective clothing when appropriate. Avoid creation of dust clouds.

Section 6: Accidental Release Measures

Containment:

Contain the released material. Remove sources of ignition.

Cleanup:

Sweep up and shovel and place in appropriate container for disposal.

Environmental Precautions:

Prevent product from entering drains or sewer system.

Personal Precautions and Protective Equipment: Appropriate personal protective equipment to be worn. See section 8.	
Section 7: Handling and Storage	
<p>Storage: Keep dry.</p> <p>Handling: Product should be kept dry. Avoid generating dust. Avoid contact with sharp edges and hot material. See section 8 for personal protection.</p> <p>Processing Creating Dust: If processing of this product generates dust or fine chips, keep from heat, sparks or open flame. Ventilation and vacuum systems must be designed to handle explosive dust and must be dedicated to aluminum dust only. Do not combine fines of aluminum with iron, iron oxide(rust) or other metal oxides.</p> <p>Incompatibilities: Acids, alkalis, water, halogenated compounds, metal oxides, iron powder</p>	
Section 8: Exposure Controls / Personal Protection	
<p>Engineering Controls: Use local exhaust ventilation</p> <p>Personal Protective Equipment: Respiratory Use a NIOSH/OSHA approved dust mask if dust is generated during machining operations</p> <p>Personal Protective Equipment: Eyes Wear safety glasses with side shields</p> <p>Personal Protective Equipment: Hands Wear leather or other appropriate work gloves to avoid any skin injury. When material is heated, wear gloves to protect against thermal burns.</p> <p>Personal Protective Equipment: Skin and Body Wear appropriate protective clothing</p>	
Section 9: Physical & Chemical Properties	
<p>Appearance</p> <p>Boiling Point</p> <p>Freeze-Melt Point</p> <p>Vapor Pressure (mm)</p> <p>Vapor Density (air=1)</p> <p>Solubility in water</p> <p>Specific Gravity/Bulk Density</p> <p>Odor</p> <p>% Volatile by Volume</p> <p>Flash point</p>	<p>Solid, grey metallic shapes</p> <p>Not Applicable</p> <p>900-1200°F (482-600°C)</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>Insoluble</p> <p>2.5-2.9 g/cc</p> <p>None</p> <p>Not volatile as shipped</p> <p>Not Applicable</p>
Section 10: Stability & Reactivity Information	
<p>Chemical Stability Stable under normal conditions.</p> <p>Conditions to Avoid Dust formation, heat and sources of ignition.</p> <p>Incompatible Materials Strong acids and alkaline solutions. Water, halogenated compounds and iron oxide (rust)</p> <p>Hazardous Decomposition Products Burning of metal products produces metal oxides and fumes of aluminum or aluminum oxide</p>	
Section 11: Toxicological Information	
<p>General Product Information Aluminum dust fines and fumes are a low health risk. Generally considered to be biologically inert. Chronic overexposure to aluminum can result in lung damage and has been associated with asthma-like syndrome. Accumulation of aluminum in the body may result in neurological damage, anemia and bone softening. Repeated</p>	

overexposure to high levels of aluminum oxide may lead to pulmonary fibrosis. Inhalation of metal fumes may cause metal fume fever, a flu-like illness generally lasting 24 hours or less.

Exposure

- Eyes: symptoms include redness and epiphora.
- Skin: symptoms redness and irritation.
- Ingestion: symptoms may include (but not limited to) thirst, abdominal pain, gastroenteritis and inflammation of the digestive tract.
- Inhalation: symptoms include (but not limited to) coughing, sneezing, wheezing and shortness of breath.

Component Analysis

See section 3

Potential Health Effects

- **Carcinogenicity:** No data available.
- **Ecotoxicity:** No data available.
- **Reproductive Toxicity:** Not established
- **Teratogenicity:** Not established
- **Embryotoxicity:** Not established
- **Mutagenicity: Not established**

Section 12: Ecological Information

- **Ecotoxicity:** No information found
- **Mobility:** Not considered mobile
- **Persistence and Degradability:** Not expected to be biodegradable.
- **Bio accumulative Potential:** The product is not bioaccumulating.
- **Other Adverse Effects:** None known.

Section 13: Disposal Considerations

Waste must be disposed of in accordance with federal, state and local regulations.

Section 14: Transportation Information

US DOT Information:

Not regulated under Department of Transportation regulations as shipped.

Section 15: Regulatory Information

General Product information:

Components of this product have been checked against the non-confidential TSCA inventory by CAS registry number.

Components not identified on this non-confidential inventory are either exempt from listing or are listed on the confidential inventory as declared by the supplier.

Component	CAS #	SARA 313	Components appearing on State hazardous Substance Lists					
			CA	FL	MA	MN	NJ	PA
Aluminum	7429-90-5	1.0% de minimus	Yes	No	Yes	Yes	Yes	Yes
Silicon	740-21-3	-	No	No	Yes	Yes	Yes	Yes
Copper	7440-50-8	1.0% de minimus	Yes	No	Yes	Yes	Yes	Yes
Zinc	7440-66-6	1.0% de minimus	Yes	No	Yes	No	Yes	Yes
Iron	7439-89-6	-	Yes	No	No	No	No	No
Magnesium	7439-96-5	-	Yes	No	Yes	Yes	Yes	Yes
Chromium	7440-47-3	1.0% de minimus	Yes	No	Yes	Yes	Yes	Yes
Magnesium	7439-95-4	1.0% de minimus	Yes	Yes	Yes	Yes	Yes	Yes

Warning: This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

Section 16: Other Information