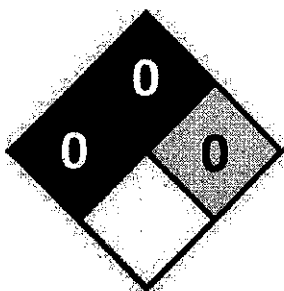


**1-B****PRODUCT IDENTIFIER****SIGNAL WORD:****WARNING**  
ADVISO**ALUMINUM  
COIL  
LINE SET****GHS Hazard Statement**

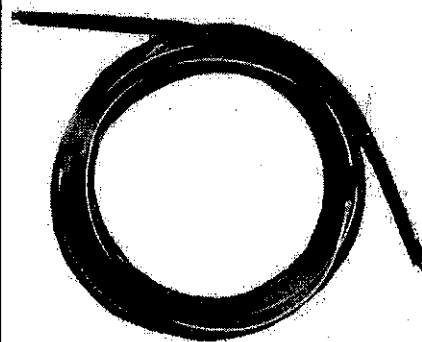
Non-combustible as supplied. Small chips, fine turnings and dust from processing may be readily ignitable if dispersed in air. Dust and fines are in contact with certain metal oxides (rust, aluminum oxide).

**INGESTION:** No ingestion hazards.

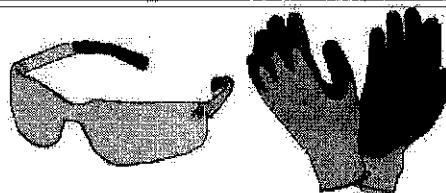
**SKIN:** Dust and fumes from processing can cause irritation of the skin. Contact with residual oil/oil coating can cause irritation.

**RESPIRATORY:** Dust and fumes from processing may cause irritation of the respiratory tract from cutting, grinding, welding or melting.

**EYES:** Dust and fumes from processing can cause irritation of the eyes.

**GHS Classification and Pictograms****HEALTH  
HAZARDS****PHYSICAL  
HAZARDS****ENVIRONMENTAL  
HAZARDS**

NONE

**TARGET ORGAN  
EFFECTS****FIRE FIGHTING  
EQUIPMENT****Type D Extinguisher**  
on fine or moltened metal**PPE  
EPP****FIRST  
AID**

**EYES:** Dust and Fumes from processing- Rinse eyes with plenty of water or saline for 15 mins. Consult a Physician.

**SKIN:** Dust and Fumes from processing- Wash with soap and water for 15 mins. Consult Physician if irritation develops or persist.

**INGESTION:**

**INHALATION:** Dust and Fumes from processing- remove to fresh air. Check for clear airway, breathing, and pulse. Perform CPR for persons without pulse or respirations. Consult a physician.

## Safety Data Sheet: Aluminum Alloys

### Section 1: Product Identification

**Manufacturer/Supplier:**

Wolverine Tube, Inc.  
2100 Market Street NE  
Decatur, AL 35601  
(800) 633-3972

**Recommended Use and Restrictions:**

Manufacture of articles.

**Emergency Information:**

CHEMTREC (24HR Emergency Telephone), call:  
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887



**GHS Product Identifier:** Aluminum Alloys

**Other Means of ID:** Aluminum Dust, Al

### Section 2: Hazard Identification

**Classification:** Aluminum and aluminum alloys are considered an "article" and not hazardous in its solid form. However, certain process such as cutting, milling, grinding, melting and welding could result in some hazardous materials being emitted. The GHS Classification below pertains to these emitted products during these processes.

**Signal Word, Hazard Statements & Symbols:** WARNING

Symbols	Hazard	GHS Classification	Hazard Statements
	Flammable Solid	Category – 1	Flammable Solid (in chips or powder form)
	STOT (single exposure)	Category – 1	May cause respiratory and skin irritation.
N/A	Eye Irritation	Category – 2B	Causes eye irritations.

**Notes:**

STOT – Specific Target Organ Toxicity

### Section 5: Fire and Explosion Data

**Suitable Extinguishing Media:** Non-flammable. Not applicable for solid product. Use Class D extinguishing agents or sand on fires involving dusts or fines. Use extinguishers appropriate for surrounding materials. DO NOT use water on molten metal. DO NOT use water on dust, powder or fume fires.

**Specific Hazards:** Dusts from grinding operations may burn if they are ignited. Dust, powder and fumes are flammable when exposed to flame or by chemical reaction with oxidizing agents.

**Hazardous Combustion Products:** At temperatures above the melting point, fumes containing aluminum oxides and smaller amounts of other alloying elements (if present) may be liberated.

**Special Protective Equipment and Precautions for Firefighters:** Firefighters should wear self-contained NIOSH-approved breathing apparatus and full protective clothing.

**Explosion Data:** Molten metal in contact with water may be explosive.

### Section 6: Accidental Release Measures

**Personal Precautions, PPE and Emergency Procedures:** Not applicable to aluminum in solid state. Avoid dust formation. Ensure adequate ventilation. Clean-up personnel should be protected against contact with eyes and skin protection.

**Environmental Precautions:** Not applicable to aluminum in solid state. Do not flush into surface water or sanitary sewer system.

**Methods and Materials for Containment and Clean-up:** Solid metal does not pose any problems. Dust spills should be cleaned up avoiding dust generation. Wash down with water if in contact with acids. Avoid inhalation of dusts. Collect scrap aluminum for recycling.

### Section 7: Handling and Storage

**Precautions:**

Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible.

**Storage:**

Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool well-ventilated place.

**Incompatibilities:**

Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

Section 11: Toxicological Data			
Component	LD <sub>50</sub> Oral	LD <sub>50</sub> Dermal	LD <sub>50</sub> Inhalation
Aluminum	Unknown	—	—
<p><b>Likely Routes of Entry:</b> None for Aluminum &amp; alloys in their natural solid form. Prolonged skin contact with coated aluminum may cause skin irritation in sensitive individuals. Inhalation of metal particulate or elemental oxide fumes generated during welding, burning, grinding or machining may pose acute or chronic health effects.</p> <p><b>Eyes:</b> High concentrations of dust may cause irritation to the eyes. Fumes can cause eye irritations. Ultra-violet radiation from welding can cause flash burns (welder's flash or pink eye).</p> <p><b>Skin:</b> May cause skin irritations. Prolonged skin contact with coated aluminum may cause skin irritation in sensitive individuals. Workers with anemia, kidney damage, digestive, respiratory, nervous systems, pregnant women and fertile females warrant particular attention.</p> <p><b>Inhalation:</b> Dust may irritate nose and throat. If heated, aluminum fumes may cause metal fume fever, a delayed, benign, transient flu-like condition.</p> <p><b>Symptoms related to the physical and chemical characteristics:</b> None for Aluminum &amp; alloys in their natural solid state.</p> <p><b>Effects of acute exposure to material:</b>  <b>Aluminum:</b> Can cause skin and eye irritation.</p> <p><b>Effects of chronic exposure to material:</b>  <b>Aluminum:</b> 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 overexposure to high levels of aluminum oxide may lead to pulmonary fibrosis, a progressive lung disorder.</p> <p><b>STOT (Single Exposure):</b> Can cause skin and eye irritation.  <b>STOT (Repeated Exposures):</b> Respiratory system. Allergic skin reactions.</p> <p><b>Mutagenicity of material:</b> N/A.</p> <p><b>Reproductive Effects:</b> N/A</p> <p><b>Teratogenicity of Material:</b> N/A</p> <p><b>Carcinogenicity of Material:</b>  <b>Aluminum:</b> Aluminum is not listed by the IARC as a carcinogen. However, the production of aluminum is classified by the IARC as Class 1 "Carcinogenic to Humans."</p> <p><b>Synergistic Materials:</b> N/A  <b>Aspiration Hazard:</b> No data.  <b>Sensitization of Material:</b> Workers with skin sensitivity warrant particular attention.</p> <p><b>LD<sub>50</sub> (of Material):</b> Not established  <b>LC<sub>50</sub> (of Material):</b> Not established</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• STOT – Specific Target Organ Toxicity</li> <li>• International Agency for Research on Cancer (IARC) – Summaries &amp; Evaluations (2008).</li> </ul>			

### Section 15: Other Regulatory Information

**Regulatory Information:** The components of this material are subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA – October 2006), as follows:

Chemical Name	SARA 302 (40 CFR 355, App. A)	SARA 304 (40 CFR Table 302.4)	SARA 313 (40 CFR 372.65)	CERCLA Reportable Quantities
Aluminum	No	No	Yes	None Listed

**SARA Threshold Planning Quantity:** There are no specific Threshold Planning Quantities for the components of this material. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lb. (4,540 kg) therefore applies, per 40 CFR 370.20.

**TSCA Inventory Status:** The components of this material are listed on the Toxic Substances Control Act Inventory.

**CERCLA Reportable Quantity (RQ):** No RQ's.

**Other US Federal Regulations:** None listed.

### Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

**Created:** 05/20/2015 16:00

**Last Updated:** ---

*The information contained herein is believed to be accurate but is not warranted to be so. All hazard classifications involve data and interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of a specific hazard. To deal adequately with the safe handling of this product, all the information contained in this SDS must be considered and reasonable safety precautions followed. The information contained in the Safety Data Sheet is based on the individual properties of the components of the mixture. Terrell Technical Services, Inc. has compiled the information and recommendations contained in this Safety Data Sheet from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the SDS was prepared. No warranty, guarantee, or representation is made as to the correctness or sufficiency of the information. The user of this product must decide for itself what specific safety measures are necessary to safely use this product, either alone or in combination with other products.*

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