

# SAFETY DATA SHEET

## SUPERIOR AFCW Sn96.5/Ag3.5

DATE REVISED: January 1, 2018

### SECTION 1 -- IDENTIFICATION

**Product Name/Part number:** Superior AFCW Sn96.5/Ag3.5

**Recommended use:** Tin-Silver Aluminum Flux Cored Soldering Wire

**Manufacturer:** Superior Flux & Mfg. Co.  
6615 Parkland Blvd  
Cleveland OH, 44139

**Emergency Contact:** CHEMTREC  
**Emergency Phone:** 1-800-424-9300  
**For other info:** (440) 349-3000

### SECTION 2 – HAZARD(S) IDENTIFICATION

**Classification of the substance or mixture**

**GHS Classification in accordance with OSHA HCS (29 CFR 1910)**

Corrosive to metals (Category 1)	H290
Skin corrosion (Category 1B)	H314
Skin sensitization (Category 1)	H317
Serious eye damage (Category 1)	H318
Acute oral toxicity (Category 3)	H335
Reproductive toxicity (Category 1B)	H360
Acute aquatic toxicity (Category 1)	H400
Chronic aquatic toxicity (Category 1)	H410

**GHS Label Elements, including precautionary statements**

**Pictogram(s):**



**Signal Word:** Danger

**Hazard Statement(s)**

H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
**H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H335	May cause respiratory irritation
H360	May damage fertility or the unborn child
**H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

\*\*May be omitted from label due to presence of stricter or more specific hazard statement.

**Precautionary statement(s)**

P261	Avoid breathing fumes, gas, mist, vapours, or spray
P264	Wash skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace
P273	Avoid release to the environment
P280	Wear protective gloves, protective clothing and face protection

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.  
 Rinse skin with water or shower  
 P304+P340+P310 IF INHALED: Remove person to fresh air and keep comfortable for  
 breathing. Immediately call a POISON CENTER or doctor.  
 P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes.  
 Remove contact lenses, if present and easy to do. Continue rinsing.  
 Immediately call a POISON CENTER or doctor.  
 P308+P313 If exposed or concerned: Get medical advice  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention  
 P363 Wash contaminated clothing before reuse  
 P391 Collect spillage  
 P403 Store in a well-ventilated place.  
 P405 Store locked up  
 P501 Dispose of contents and/or container to an approved waste disposal plant.

**Hazards not otherwise classified or not covered by GHS:** None

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### SECTION 3 – COMPOSITION INFORMATION

Components	CAS Number	%
Tin	7440-31-5	93-94
Silver	7440-22-4	3-4
Aminoethylethanolamine	111-41-1	< 2
Zinc Oxide	1314-13-2	<1
Ammonium Hydrogendifluoride	1341-49-7	<1

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### SECTION 4 – FIRST AID MEASURES

#### Description of first aid measures

**General advice:** Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration or oxygen by trained personnel. Seek immediate medical attention

**Eyes:** Flush with water for at least 15 minutes to remove irritant. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.

**Skin:** Remove contaminated clothing. Wash affected area with soap and water. Wash clothing before reuse. If irritation persists, obtain medical attention.

**Ingestion:** If patient is conscious, ONLY induce vomiting as directed by trained personnel. NEVER give anything by mouth to an unconscious person. Seek medical attention immediately.

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## SECTION 5 – FIREFIGHTING MEASURES

**Suitable Extinguishing Media:** Use extinguishers appropriate for the surrounding fire conditions.

**Advice for firefighters:** Use NIOSH/MSHA – approved self-contained breathing apparatus and full protective clothing if involved in fire.

**Further information** **DO NOT USE WATER ON MOLTEN METAL. LARGE FIRES MAY BE FLOODED WITH WATER FROM A DISTANCE.**

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## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal Precautions and Equipment and emergency procedures:** Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas.

*See section 8 for personal protection.*

**Methods and materials for containment and cleaning up** Contain spill. If molten, cool to allow metal to solidify. If a solid metal, wear gloves, pick up and return to process. Dispose of alloy following all Federal, State, and local regulations. In the EU refer to the Special Waste Regulations. Metal may have reclaim value.

*For disposal, see section 13.*

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## SECTION 7 - HANDLING AND STORAGE

**Precautions for safe handling:** Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Only dry metals should be added to molten bath. If working with molten metals, or exposed to fume or dust, use appropriate personal protective equipment.

**!!! WET OR MOIST INGOT(S) WILL PRESENT AN EXPLOSION HAZARD WHEN SUBMERGED IN MOLTEN SOLDER. AVOID FIRE/EXPLOSION RISKS – ALWAYS PREHEAT INGOT BEFORE CHARGING INTO FURNACE. !!!**

*For precautions, see section 2.*

**Conditions for safe storage, including any incompatibilities** Store product in a cool, dry area away from incompatible materials.

*For full precaution statements see Section 2*

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## SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

**OSHA Permissible Exposure Limit (PEL):** 1 mg/m<sup>3</sup>

**ACGIH Threshold Limit Value (TLV):** 1 mg/m<sup>3</sup>

**General Precautions:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

**Engineering Controls:** Use local exhaust ventilation to maintain air concentrations of dust, vapors and fumes below occupational exposure standards.

**Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate, use an authority approved or compliant marked air-purifying respirator with a fume/dust chemical cartridge is recommended under circumstances where airborne concentrations are expected to be elevated. Use respirators and components tested and approved under appropriate government standards such as NIOSH (USA) or CEN (EU).

**Protective Gloves:** Handle with leather or vinyl gloves

**Eye Protection:** Chemical safety glasses or goggles, and face shield with molten metal. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (USA) or EN 166 (EU)

**Body Protection:** Impervious clothing and leather or vinyl gloves. Heat resistant gloves if handling hot metal. Safety boots. Personal protective equipment is recommended when working with molten metal to avoid burns.

**Control of environmental exposure:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

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## SECTION 9 - PHYSICAL AND CHEMICAL CHARACTERISTICS

<b>Appearance</b>	Silver grey metal (wire or rod)
<b>Odor</b>	No data available
<b>Odor threshold</b>	No data available
<b>pH</b>	No data available
<b>Melting point/Freezing point</b>	No data available
<b>Initial boiling point and boiling range</b>	No data available
<b>Flash point</b>	Not applicable
<b>Evaporation rate</b>	No data available
<b>Flammability (Solid, gas)</b>	No data available
<b>Upper flammability or explosive limits</b>	Upper explosion limit: Not applicable
<b>Lower flammability or explosive limits</b>	Lower explosion limit: Not applicable
<b>Vapor pressure</b>	No data available
<b>Vapor density</b>	No data available
<b>Relative density (Water = 1)</b>	No data available
<b>Solubility(ies)</b>	Insoluble in water
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Decomposition temperature</b>	No data available
<b>Viscosity</b>	Not applicable

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## SECTION 10 - STABILITY AND REACTIVITY

**Reactivity:** No data available

**Stability:** Product is stable under recommended storage conditions

**Possibility of hazardous reactions:** No data available

**Conditions to Avoid:** Excessive heat, exposure to moisture

**Incompatible Material:** Avoid contact with mineral acids.

**Hazardous Decomposition Products** Harmful metal oxide fumes may form at elevated temperatures.

*In the event of fire: See Section 5*

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## SECTION 11 - TOXICOLOGICAL INFORMATION

### Carcinogenicity

**National Toxicity Program (NTP):** No

**Occupational Safety & Health Administration (OSHA):** No

**U.N. International Agency for Research on Cancer (IARC):** No

**LD50:** Not established      **LC50:** Not established

**Other:** None

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## SECTION 12 - ECOLOGICAL INFORMATION

**Toxicity** No data available

**Persistence and degradability** No data available

**Bioaccumulative potential** No data available

**Mobility in soil** No data available

**Other adverse effects**

### Avoid release to environment

*An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.*

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## SECTION 13 - DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Product** Scrap metal alloy usually has value. Contact a commercial reclaimer for recycling. Otherwise, dispose of in accordance with all Federal, State, and Local environmental regulations. In Europe follow the Special Waste Regulations. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

*Metal may have reclaim value.*

**Contaminated packaging** Dispose of as unused product.

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## SECTION 14- TRANSPORTATION

**D.O.T. (USA)** Not regulated

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## **SECTION 15 - REGULATORY INFORMATION**

**SARA 302 Components** No Chemicals in this material are subject to the reporting requirement of SARA Title III, Section 302.

**SARA 313 Components** No chemicals in this material are subject to the reporting requirement of SARA Title III, Section 313.

**SARA 311/312 Hazards** Hazardous to the environment, Acute health hazard

### **California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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## **SECTION 16 - OTHER INFORMATION**

### **Further information:**

Judgments as to the suitability of information herein or the purchaser's purposes are necessarily the purchaser's responsibility. The above information does not represent any guarantee of the properties of the product. It is believed to be correct, but does not purport to be all inclusive and should be used only as a guide. Reasonable care has been taken in the preparation of this material, and is based on the present state of our knowledge.

Superior Flux & Mfg. Co. shall not be held liable for any damage resulting from handling or from contact with the above product. There are *NO WARRANTIES, NO REPRESENTATIONS AND NO RESPONSIBILITY AS TO THE ACCURACY OR THE SUITABILITY OF THIS INFORMATION FOR ANY PURCHASER'S USE OR FOR ANY CONSEQUENCE TO USE.*

### **Preparation information**

Superior Flux & Mfg. Co.  
440-349-3000

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