



# MATERIAL SAFETY DATA SHEET

**CHROMATE INDUSTRIAL CORPORATION®**

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**FOR CHEMICAL  
EMERGENCY**

Call ChemTrec day/night:  
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## 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

**PRODUCT NAME:** Auralloy 500 Super Strength Self-Fluxing Silver Solder

**DATE PREPARED:** February 27, 2015

**PRODUCT USE/RESTRICTION:** Solder

**COMPANY IDENTIFICATION:**

**PART NUMBER:** 8779: 1/8 X 1/2 lb. Spool  
8780: 1/16 X 1.0 oz. Disp. Tube  
8781: 1/32 X 0.6 oz. Disp. Tube

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## 2. COMPOSITION & INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Number
Antimony:	7440-36-0	0-10 by weight	
Copper:	7440-50-8	0-10 by weight	
Silver:	7440-22-4	0-10 by weight	
Tin:	7440-31-5	0-100 by weight	

## 3. HAZARD IDENTIFICATION

**Emergency Overview:** CAUTION! Irritant. Exposure to soldering fumes may be irritating to eyes, respiratory system and skin.

**Route of Exposure:** Eyes, Skin, Inhalation, Ingestion

- Eye:** Smoke during soldering can cause eye irritation
- Skin:** May cause irritation
- Inhalation:** Prolonged or excessive inhalation may cause respiratory tract irritation.
- Ingestion:** May be harmful if swallowed. May cause vomiting.

## 4. FIRST AID MEASURES

- Eye Contact:** Immediately flush eyes with water 15 to 20 minutes. Get medical attention, if irritation or symptoms of overexposure persists.
- Skin Contact:** Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.
- Inhalation:** If inhaled, remove to fresh air, If not breathing, give artificial respiration or give oxygen by trained personnel, seek immediate attention.
- Ingestion:** If swallowed, do not induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

## 5. FIREFIGHTING

<b>Flash Point:</b>	>93 °C (>199 °F)
<b>Upper Flammable/Explosive Limit:</b>	Not applicable.
<b>Lower Flammable/Explosive Limit:</b>	Not applicable.
<b>Extinguishing Media:</b>	Use alcohol resistant foam, carbon dioxide, dry chemical or water fog or spray when fighting fires involving this material.
<b>Unsuitable Media:</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Protective Equipment:</b>	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Hazardous Combustion Byproducts:</b>	Oxides of carbon, oxides of nitrogen, aliphatic aldehydes, and other organic substances may be formed during combustion. Melted solder above 1000 deg F will liberate toxic lead and / or antimony fumes.

### NFPA Ratings

<b>NFPA Health:</b>	1
<b>NFPA Flammability:</b>	0
<b>NFPA Reactivity:</b>	0
<b>NFPA Other:</b>	

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personnel Precautions:</b>	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Avoid breathing vapor, aerosol or mist. Avoid contact with skin, eyes and clothing.
<b>Environmental Precautions:</b>	Avoid runoff into storm sewers, ditches, and waterways.
<b>Methods For Containment:</b>	Melted solder will solidify on cooling and can be scraped up.
<b>Methods For Cleanup:</b>	Solidified solder can be scraped up upon cooling. Use caution to avoid breathing fumes if a gas torch is used to cut up large pieces.

## 7. HANDLING AND STORAGE

<b>Handling:</b>	Use with adequate ventilation. Avoid breathing vapor and fumes. Use only in accordance with directions.
<b>Storage:</b>	No special storage conditions required.
<b>Hygiene Practices:</b>	Wash thoroughly after handling. Avoid inhaling vapors, mists, or fumes.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

<b>Engineering Controls:</b>	Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Where such systems are not effective wear suitable other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
<b>Eye/Face Protection:</b>	Safety glasses with side-shields.
<b>Hand Protection Description:</b>	Wear appropriate protective gloves. Consult glove manufacturer's data for permeability data.
<b>Respiratory Protection:</b>	When ventilation is not sufficient to remove fumes from the breathing zone a safety approved respirator or self-contained breathing apparatus should be worn.

### Exposure Guidelines

#### Antimony:

**Guideline ACGIH:** TLV-TWA : 0.5mg/m<sup>3</sup>

**Guideline OSHA:** PEL-TWA : 0.5 mg/m<sup>3</sup>

#### Copper:

**Guideline ACGIH:** TLV-TWA: 1 mg/m<sup>3</sup>

**Guideline OSHA:** PEL-TWA :1 mg/m<sup>3</sup>

#### Silver:

**Guideline ACGIH:** TLV-TWA: 0.1 mg/m<sup>3</sup>

**Guideline OSHA:** PEL-TWA :0.01 mg/m<sup>3</sup>

#### Tin:

**Guideline ACGIH:** TLV-TWA: 2 mg/m<sup>3</sup>

**Guideline OSHA:** PEL-TWA : 2 mg/m<sup>3</sup>

## 9. PHYSICAL & CHEMICAL PROPERTIES

<b>Physical State Appearance:</b>	Solid.
<b>Color:</b>	Sliver grey.
<b>Odor:</b>	Odorless.
<b>Boiling Point:</b>	Not determined.
<b>Melting Point:</b>	>100 °C (>212 deg F)
<b>Density:</b>	>7 g/cm <sup>3</sup> (@ 20 °C (68 °F))
<b>Flash Point:</b>	>93°C (>199 °F)

## 10. STABILITY & REACTIVITY

<b>Chemical Stability:</b>	Stable under normal temperatures and pressures.
<b>Hazardous Polymerization:</b>	Not reported.
<b>Conditions to Avoid:</b>	No thermal decomposition if used according to specifications.
<b>Incompatible Materials:</b>	Oxidizing agents. Strong acids and alkalis.
<b>Special Decomposition Products:</b>	When heated to soldering temperatures, the solvents are evaporated and rosin may be thermally degraded to liberate aliphatic aldehydes and acids.

**11. TOXICOLOGICAL INFORMATION**

**Antimony:**

**Ingestion:** Oral- Rat LD50:100 mg/kg [Details of toxic effects not reported other than lethal dose value.] (RTECS)

**Copper:**

**Ingestion:** Oral- MouseLD50:413 mg/kg [Details of toxic effects not reported other than lethal dose value.]

**Ingestion:** Oral- Mouse LD50: >5000 mg/kg [ Behavioral- food intake (animal) Gastrointestinal-Hypermotility, diarrhea Gasrointesinal-nausea or vomiting] (RTECS)

**Silver:**

**Ingestion:** Oral- Mouse LD50:100 mg/kg [Details of toxic effects not reported other than lethal dose value.] (RTECS)

**Tin:** Appendages- sweating ] (RTECS)

**Ingestion:** Oral- Bird duck LDLo: 388 mg/kg- [Autonomic Nervous System - other (direct) parasympathomimetic oral- ataxia Blood -changes in leukocyte(WBC) Count] (RTECS)

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** No ecotoxicity data was found for the product.

**Environmental Fate:** No environmental information found for this product.

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal:** Consult with this US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and / or state and local guidelines.

**14. TRANSPORT INFORMATION**

- DOT Shipping Name:** Not Regulated
- DOT UN Number:** Not Regulated
- IATA Shipping Name:** Not Regulated
- IATA UN Number:** Not Regulated
- IMDG Shipping Name:** Not Regulated
- IMDG UN Number:** Not Regulated
- RID Shipping Name:** Not Regulated
- RID UN Number:** Not Regulated

**15. REGULATORY INFORMATION**

**Canada Reg. Status:** This product has been classified in accordance with the hazard criteria of the Controlled products Regulation and the MSDS contains all of the information required by the the Controlled Products Regulations.

**Canada WHMIS:** Controlled- Class: D24 Very Toxic.

**Tin:**

**TSCA Inventory Status:** Listed

**Canada DSL:** Listed

**Antimony:**

**TSCA Inventory Status:** Listed

**Canada DSL:** Listed

**Copper:**

**TSCA Inventory Status:** Listed

**Canada DSL:** Listed

**Silver:**

**TSCA Inventory Status:** Listed

**Canada DSL:** Listed

**16. OTHER INFORMATION**

**General Use:** Solder

**HMIS Health Hazard:** 1

**HMIS Fire Hazard:** 0

**HMIS Reactivity:** 0

**HMIS Personal Protection:** X

**MSDS Creation Date:** 1-May-14

**MSDS Revision Date:** 27-February-15

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