

SAFETY DATA SHEET

SUPERIOR 59-193-90

DATE REVISED: December 1, 2017

Product Name: Superior 59-193-90

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

Emergency Phone Number: 1-800-424-9300 (CHEMTREC)

Other Information Calls: (440) 349-3000

To the Purchaser: This SDS contains important environmental, health, and toxicology information for your employees who have ordered this product. Please be sure this information is given to them. If you resell this product, a copy of the SDS should be given to the buyer.

H.M.I.S. INFORMATION: HEALTH = 1 FLAMMABILITY = 1 REACTIVITY = 1

SECTION I - IDENTIFICATION

Common Name: Superior 59-193-90

Chemical Family: No Clean (Low Temperature) Printable Solder Paste

CAS Number: NA

Chemical Name: NA

Formula: See Below

SECTION II – HAZARDS IDENTIFICATION

Classification of Substance or Mixture:

Classification (CLP): No Data Available

Label Elements (CLP): No Data Available



Warning

Health hazard

H Statements: H334, H317

P Statements: P280, P302+P352

Risk Phrases: None

Safety Phrases: S36, S39

See section XVI for full text description of S and R phrases

Other Hazards: None if used properly

SECTION III- COMPOSITION INFORMATION

Components	CAS Number	%	OSHA PEL
Tin	7440315	30-40	2.0 mg/m ³
Bismuth	7440699	40-60	NA
Silver	7449224	1-3	0.10 mg/m ³

Unlisted percentages are non-hazardous stabilizers, activators, and water. None of the materials in this product are listed in NTP, IARC, or OSHA as carcinogens.

SECTION IV- HEALTH HAZARDS

Primary Routes of Entry: Fume inhalation, ingestion, skin, and eyes.

Signs and Symptoms of Exposure:

- 1) **Acute Effects:** Reddening of eyes and skin, acid stomach if ingested, inhalation may cause respiratory tract irritation.
- 2) **Chronic Effects:** No specific information available

Medical Conditions Generally Aggravated by Overexposure: None presently known.

Chemical Listed as a Carcinogen or Potential Carcinogen: None

OSHA Permissible Exposure Limit (PEL): 0.15 mg/m³

ACGIH Threshold Limit Value (TLV): 0.15 mg/m³

EMERGENCY AND FIRST AID PROCEDURES

Eyes: Flush with water for 10 minutes. Call a physician.

Skin: Wash thoroughly with water.

Inhalation: Remove to fresh air or administer oxygen. Call a physician.

Ingestion: If patient is fully conscious, give two glasses of water. Obtain medical attention immediately.

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Flash Point: Flux>300°C

Metal: NA

Flammable Limits: NA

Extinguishing Media: Special mixtures of dry chemicals suitable for metal fires such as dry sand, dolomite, graphite, salt, and soda ash.

Do Not Apply Water to Burning or Melted Metal. Water can be used to cool containers when no contact with metal will occur.

Auto Ignition Temperature: NA

SECTION VI - ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is spilled: Protect skin and eyes by wearing safety glasses and gloves. Ventilate the area. Restrict and collect spilled materials

SECTION VII - HANDLING AND STORAGE

Storage Requirements: Store in low temperature and low humidity area.

Handling Precautions: Users should wear protective gloves and glasses when handling solder paste. soldering should be conducted in good ventilation environment.

Other Precautions: Keep the tin, silver, and lead fume levels below the OSHA permissible exposure limit.

SECTION VIII - CONTROL MEASURES

Respiratory Protection (TYPE): NIOSH approved.

Ventilation: Yes

Mechanical (General): Optional

Local Exhaust: Yes

Eye Protection: Safety glasses

Protective Gloves: Rubber gloves

Other Protective Clothing or Equipment: Laboratory or worker coat

Work/Hygienic Practices: Wash hands after handling the product, wear safety glasses during handling

SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point: NA

Specific Gravity (Water = 1): 4.0-5.5

Vapor Pressure (mm Hg): NA

Percent Volatile by Volume: NA

Vapor Density (Air = 1): NA

Evaporation Rate (Butyl Acetate = 1): NA

Melting Point: 140°C

Solubility in Water: Partial

Reactivity in Water: None

Appearance and Odor: Pasty and mild solvent odor

SECTION X - STABILITY AND REACTIVITY

Stability: Product is stable

(Conditions to Avoid): Contact with strong acids and alkali.

Incompatibility: Strong acids and alkali.

Hazardous Decomposition Products: Not determined.

Hazardous Polymerization: Not determined.

(Conditions to Avoid): Not determined

SECTION XI - TOXICOLOGICAL INFORMATION

Acute Toxicity Data

- 1) **Oral:** LD-50 (rat): Not available
- 2) **Inhalation:** LC-50 (rat): Not available
- 3) **Dermal:** LD-50 (rabbit): Not available
- 4) **Skin Irritation:** (rabbit): Not available

Chronic Toxicity Data

- 1) **Repeated Skin Application:** (rat): Not available
 - 2) **Eye Irritation:** (rabbit): Not available
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SECTION XII - ECOLOGICAL INFORMATION

This Material has not been Tested for Environmental Effects.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of in accordance with EPA regulations.

SECTION XIV- TRANSPORTATION

D.O.T. Proper Shipping Name: Non-hazardous

Identification Number: NA

Type D.O.T Label Required Information: NA

Hazard Class: NA

Packing Group: NA

SECTION XV - REGULATORY INFORMATION

OSHA Hazardous Chemical According to 29 CFR 1910.1200: None

Carcinogenicity Classification (Components Present at 0.1% or More): Non-Carcinogenic

International Agency for Research on Cancer (IARC): Not Listed

American Conference of Governmental Industrial Hygienists (ACGIH): Not Listed

National Toxicology Program (NTP): Not Listed

Occupational Safety and Health Administration (OSHA): Not Listed

None of the Components of this Product are Listed on the U.S. Toxic Substances Control Act.

Inventory or Otherwise Comply with TSCA Pre-manufacture Notification Requirements.

This Product is RoHS Compliant.

SECTION XVI - OTHER INFORMATION

The labeling of this product is indicated in Section II. The full text of all abbreviations indicated by codes in the SDS are as follows:

S-36/39 Wear suitable protective clothing and eye/face protection

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

H317 May cause an allergic skin reaction

P280 Wear protective gloves/protective clothing/eye protection/face protection

P302+P352 IF ON SKIN: Wash with plenty of water and soap.

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