

Revision Date: 9/2/2008

**MATERIAL SAFETY DATA SHEET****Section 1: PRODUCT AND COMPANY IDENTIFICATION****Product Name:** SN100C(L)e Lead-free Solder

FCT Assembly Inc.  
 1309 N. 17th Ave.  
 Greeley, CO 80631  
 USA

Company Phone Number: 970-346-8002

Website: www.fctassembly.com

**Emergency Phone Number: 800-535-5053****Section 2: HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW

Signal Word: CAUTION

Hazard Type: None

Appearance: Solid- silver metallic metal

Color: Grey

Odor: None

Likely Exposure Routes: Ingestion, Skin

Exposure Effects

Inhalation: May cause physical discomfort to the respiratory tract.

Eyes: May cause slight irritation.

Ingestion: May cause nausea and vomiting. May cause irritation to the mouth, throat and stomach.

Skin: Prolonged contact may cause mild skin irritation.

Target Organs: Not Determined

Potential Carcinogens as listed by OSHA, IARC, or NTP: NONE

Other Possible Health Effects: See Section 11 for more information.

This material is NOT considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Environmental Effects: May cause long-term adverse effects in the aquatic environment.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Hazardous Component(s)	CAS Number	Weight Percentage
Tin	7440-31-5	>99%

Revision Date: 9/2/2008

**MATERIAL SAFETY DATA SHEET****SECTION 4: FIRST AID MEASURES**

Inhalation: Move to fresh air. Get medical attention if symptoms occur.

Eyes: Immediately flush with water for at least 15 minutes or until the chemical is removed.

Ingestion: If conscious, rinse mouth with water. Seek medical advice on whether to induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

Skin: Wash off immediately with soap and water. If clothing is contaminated, remove and launder before reuse.

Special instructions for physicians: Follow usual and customary procedures

**SECTION 5: FIRE FIGHTING MEASURES**

Fire fighting measures: Standard procedure for chemical fires.

Fire fighter protection: Vapors and fumes may be irritating and toxic. Firefighters should wear self-contained breathing apparatus and full fire-fighting turnout gear.

Suitable extinguishing media: Carbon dioxide, dry chemical, foam or water spray.

Unsuitable extinguishing media: Not applicable

As with any chemical fire, combustion products of unknown toxicity are always possible.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

Personal Precautions: Use personal protection recommended in Section 8.

Containment methods: If possible, stop further leakage of the material. Contain spilled material by diking with non-flammable diking materials.

Clean-Up methods: Absorb spilled liquid in a suitable material. Sweep or vacuum material into disposal containers.

Environmental precautions: This material is a water pollutant. Keep out of drains, sewers, ditches and waterways. Minimize use of water to prevent environmental contamination.

Spill reporting requirements: If the spilled amount is greater than the RQ in section 15, this spill must be reported to the National Response Center.

**Section 7: HANDLING AND STORAGE**

Handling: Use good industrial practices when handling. Avoid eye, skin, and clothing contact. Do not inhale mist or vapors. Do not taste or swallow. Use only with adequate ventilation.

Storage: Keep container closed when not in use. Avoid elevated and freezing temperatures.

## MATERIAL SAFETY DATA SHEET

### Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Exposure Guidelines

Material Name	OSHA		ACGIH	
	TWA	STEL	TWA	STEL
Tin	2 mg/m3	NE	2 mg/m3	NE

General Hygiene Considerations: Discard contaminated gloves after use. Have eye-wash facilities in the immediate vicinity. Work in adequately ventilated area. Do not breathe vapors or mist. Minimize any contact with any chemical.

Respiratory Protection: No special respiratory equipment is needed.

Eye/Face Protection: Wear safety glasses when handling this material.

Skin Protection: Wear nitrile or latex gloves. Wear protective clothing.

Engineering Controls: Work in well ventilated areas. Do not breathe vapors or mist.

Other Protective Equipment: Eye wash station and safety shower should be available in immediate work area. Select additional protective equipment based upon potential for exposure.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Color:	Grey	VOC Percentage:	0
Physical State:	SOLID	Evaporation Rate:	N/A
Odor:	None	Odor Threshold:	Not Determined
Melting Point:	450 F	Coeff. Water/Oil Dist. :	Not Determined
Boiling Point:	>1000F	Lower Explosive Limit:	N/A
Specific Gravity:	5.83-11.27	Upper Explosive Limit:	N/A
pH:	n/a	Flash Point:	Non Flammable
Vapor Pressure:	NONE	Solubility:	Insoluble
Vapor Density:	N/A		

### SECTION 10: STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: None known.

Incompatible Materials: None known

Hazardous decomposition products: At temps above melting point metal oxide fumes may be evolved.

Possibility of hazardous reactions: None expected.

Revision Date: 9/2/2008

**MATERIAL SAFETY DATA SHEET****SECTION 11. TOXICOLOGY INFORMATION**

The toxicological data below is based on the main component(s)

**ACUTE EFFECTS**

Acute Oral Toxicity: Not Determined

Acute Dermal Toxicity: Not Determined

Acute Inhalation Toxicity: Not Determined

Sensitizer: Not a sensitizer

Acute Eye Irritation: Mildly irritating.

Acute Skin Irritation: Not irritating.

**CHRONIC EFFECTS**

Carcinogenicity: None of the components of this product are listed as a carcinogen by IARC, NTP, OSHA, or ACGI

Mutagenicity: Not Determined

Reproductive Effects: Not Determined

Teratogenicity: Not Determined

Synergistic Products: NONE

**SECTION 12. ECOLOGICAL INFORMATION**

The ecological data below is based on the main component(s)

**ACUTE FISH RESULTS:**

Species	Exposure	LC50
Not Determined		

**ACUTE INVERTEBRATE RESULTS:**

Species	Exposure	LC50	EC50
Not Determined			

**AQUATIC PLANT RESULTS:**

Species	Exposure	LC50/EC50
Not Determined		

Persistence/Degradability: Not determined

Bioaccumulation/Accumulation: Not determined

Mobility in Environment: Not expected to be very mobile.

Revision Date: 9/2/2008

**MATERIAL SAFETY DATA SHEET****SECTION 13. DISPOSAL CONSIDERATIONS**

Product is a RCRA Hazardous Waste? NO

Dispose of in accordance with federal, state, and local regulations.

**SECTION 14. TRANSPORT INFORMATION**

US D.O.T. and Canadian TDG (ground)

Proper Shipping Description:

NON D.O.T. REGULATED

ICAO (air)

Proper Shipping Description: See US D.O.T.

IMDG (water)

Proper Shipping Description: See US D.O.T.

**SECTION 15. REGULATORY INFORMATION**

## FEDERAL REGULATORY INFORMATION

All components are listed in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory:

Title III SARA Section 302Product contains materials subject to reporting under SARA Section 302? **NO**CERCLAProduct contains materials subject to reporting under CERCLA (40 CFR302.4) **NO**Title III SARA Section 313Product contains materials subject to reporting under SARA Section 313? **NO**Resource Conservation and Recovery Act (RCRA)Product is a hazardous waste under RCRA (40 CFR 261.20)? **NO**

## STATE REGULATORY INFORMATION

California Proposition 65Product contains materials that are carcinogenic and/or can cause reproductive harm and is subject to warning and discharge requirements under the "Safe Water and Toxic Enforcement Act of 1986": **NO**

WHMIS Canadian Workplace Hazardous Material Information System

WHMIS Classification: Not Applicable

Revision Date: 9/2/2008

**MATERIAL SAFETY DATA SHEET****SECTION 16. OTHER INFORMATION**

NFPA 704: National Fire Protection Association

Health: 1      Fire: 0      Reactivity: 0

0 = Minimal hazard, 1 = Slight hazard, 2 = Moderate hazard, 3 = Severe hazard, 4 = Extreme hazard

IMO International Maritime Organization

EmS Code: Not Applicable

Prepared by: Bill Plano (970) 346-8002

The information contained herein is based on data believed to be accurate and is offered at no charge. No warranty is expressed or implied regarding the accuracy of this data. Liability is expressly disclaimed for loss or injury arising out of use of this information or the use of any materials designated. It is the users responsibility for determining whether the product is suitable for its intended conditions of use.