

Material Safety Data Sheet

1. Chemical Product & Company Information

Product Name: Lead Free Rosin Core Wire Solder
Product Code:
Product Use/Restriction: Flux cored solder
Manufacturer Name: Canfield Technologies/BOW Electronic Solders
Address: 1 Crossman Road, Sayreville, NJ 08872
General Phone Number: 732-316-2100
INFOTRAC: 24 Hour Emergency Telephone Number: 1-800-535-5053

Website: www.solders.com
MSDS Creation Date: 1-Apr-11
MSDS Revision Date: 1-Apr-11

2. Composition & Ingredients

Chemical Name	CAS#	Ingredient Percent	EC Number
Gum rosin	9/7/50	0-10 by weight	
Proprietary ingredients	Proprietary	1 - 5 by weight	
Antimony:	7440-36-0	0-10 by weight	
Bismuth:	7440-69-9	0-10 by weight	
Copper:	7440-50-8	0-10 by weight	
Silver:	7440-22-4	0-100 by weight	
Zinc:	7440-66-6	0-10 by weight	
Tin:	7440-31-5	0-100 by weight	

3. Hazard Identification

Emergency Overview: Warning! Severe Irritant. Potential Sensitizer. Exposure to soldering fumes and vapors 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.
May cause skin sensitization, an allergic reaction, which becomes evident on re-exposure to this material.

Inhalation: Inhalation of vapors, fumes or mist of this product causes severe respiratory system irritation.
May cause sensitization by inhalation.

Ingestion: May be harmful if swallowed. May cause vomiting. Ingestion of the product may produce gastrointestinal irritation and disturbances.

Target Organs: Eyes, Skin, Respiratory system, Digestive system.

Aggravation of pre-existing conditions: May aggravate pre-existing respiratory disorders, allergy, eczema, or skin conditions.

4. First Aid

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

Flash Point: >93 °C (>199 °F)

Upper Flammable/Explosive Limit: Not applicable.

Lower Flammable/Explosive Limit: Not applicable.

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, dry chemical or water fog or spray when fighting fires involving this material.

Unsuitable Media: Do not use a solid water stream as it may scatter and spread fire.

Protective Equipment: As in any fire, wear Self Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.

Hazardous Combustion Byproducts: 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

NFPA Health:	2
NFPA Flammability:	1
NFPA Reactivity:	1
NFPA Other:	

6. Accidental Release Measures

Personnel Precautions: 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.

Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.

Methods For Containment: Melted solder will solidify on cooling and can be scraped up.

Methods For Cleanup: 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

Handling: Use with adequate ventilation. Avoid breathing vapor and fumes. Use only in accordance with directions.

Storage: No special storage conditions required.

Hygiene Practices: Wash thoroughly after handling. Avoid inhaling vapors, mists, or fumes.

8. Exposure Controls & Personal Protection

Engineering Controls: 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.

Eye/Face Protection: Safety glasses with side-shields.

Hand Protection Description: Wear appropriate protective gloves. Consult glove manufacturers data for permeability data.

Respiratory Protection: 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

Gum Rosin: Sensitizer: Sen

9. Physical & Chemical Properties

Physical State Appearance: Solid

Color: Amber

Odor: Mild chemical

Boiling Point: Not determined.

Melting Point: >100 °C (>212 deg F)

Density: >7 g/cm³ (@ 20 °c (68 °F))

Flash Point: >93°C (>199 °F)

10. Stability & Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Hazardous Polymerization: Not reported.

Conditions to Avoid: No thermal decomposition if used according to specifications.

Incompatible Materials: Oxidizing agents. Strong acids and alkalis.

Special Decomposition Products: When heated to soldering temperatures, the solvents are evaporated and rosin may be thermally degraded to liberate aliphatic aldehydes and acids.
Carbon monoxide and carbon dioxide

11. Toxicological Information

Gum rosin:

RTECS Number: VL0480000

Ingestion: Oral- Mouse LD50: 2.2 mg/kg [Behavioral- somnolence (general depressed activity) cardiac- pulse rate lungs, thorax Respiration- respiratory depression]
Oral Rat LD50: 3.0 mg/kg[Brian and Coverings- other degenerative changes Liver- other changes Biochemical- Metabolism (Intermediary)-other] (RTECS)

Inhalation: Inhalation. Rat LC50: 110 mg/m³[Behavioral- somnolence (general depressed activity) cardiac- pulse rate lungs, thorax Respiration- respiratory depression](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 / 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: D2B Toxic

Tin:

TSCA Inventory Status: Listed

Canada DSL: Listed

Antimony:

TSCA Inventory Status: Listed

Canada DSL: Listed

Bismuth:

TSCA Inventory Status: Listed

Canada DSL:	Listed
Copper:	
TSCA Inventory Status:	Listed
Canada DSL:	Listed
Silver:	
TSCA Inventory Status:	Listed
Canada DSL:	Listed
Zinc:	
TSCA Inventory Status:	Listed
Canada DSL:	Listed

16. Additional Information

General Use:	Solder
HMIS Health Hazard:	1
HMIS Fire Hazard:	0
HMIS Reactivity:	0
HMIS Personal Protection:	X
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