

MATERIAL SAFETY DATA SHEET

Effective Date: 6-16-94

Revision Date: none

Energized Rosin Core Solder

Code: ALM

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Section 1 - Product and Company Identification

PRODUCT NAME: Energized Rosin Core Solder

MANUFACTURER'S NAME:

Alpha Metals
600 Route 440
Jersey City, NJ 07304EMERGENCY TELEPHONE NUMBER
(800)424-9300MISCELLANEOUS INFORMATION
(201)434-6778

Section 2 - Hazardous Ingredients

INGREDIENTS	CAS NUMBER	WEIGHT PERCENT	OSHA PEL	ACGIH TLV
Lead } Product contains	7439-92-1	*	0.05 mg/cum	0.15 mg/cum
Tin } one or more of	7440-31-5	*	2.0 mg/cum	2.0 mg/cum
Silver } these metallic	7440-22-4	*	0.01 mg/cum	0.1 mg/cum
Bismuth } elements in	7440-69-9	*	NE	NE
Antimony } varying	7440-36-0	*	0.5 mg/cum	0.5 mg/cum
Indium } percentages	7440-74-6	*	NE	0.1 mg/cum
Rosin	8050-09-7	1-4	0.10 mg/cum	0.10 mg/cum

*WEIGHT PERCENT: Composition of solder alloys vary widely therefore no weight percent or specific gravity is given. (See product label for composition.)

Section 3 - Hazards Identification

INHALATION: Exposure to rosin fume may cause dizziness and headache. May also cause an allergic reaction such as rash or throat and respiratory irritation in a sensitive person. For overexposure to lead, tin, silver, bismuth, antimony and indium fume at soldering temperatures see section 11.

INGESTION: Essentially non-hazardous at room temperature (NOT likely to occur.)

SKIN: Molten core solder will cause burns. Repeated exposure to rosin fume may cause a skin rash.

EYES: Molten rosin core flux will cause eye burns. Rosin fume can cause eye irritation.

CHRONIC TOXICITY: See section 11.

LISTED CARCINOGENS: None

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Section 4 - First Aid Measures

INHALATION: If rosin is inhaled when wire is heated to soldering temperatures, remove individual to fresh air. If breathing is difficult administer oxygen and consult a physician.

INGESTION: Call a physician or Poison Control Center immediately. Never give anything by mouth to an unconscious person.

SKIN CONTACT: For burns cool with water and obtain medical aid. For rash, remove from exposure and consult a physician.

EYE CONTACT: For burns flush immediately with cool water and obtain medical aid. for fume irritaiton remove from exposure.

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Section 5 - Firefighting Measures

ESTIMATED FLAMMABLE LIMITS(% By Volume in Air)

LEL: NA

UEL: NA

FLASH POINT(Deg F): NA

EXTINGUISHING MEDIA: NA

SPECIAL FIRE FIGHTING PROCEDURES: Use NIOSH approved self-contained breathing apparatus and full protective clothing if involved in a fire.

UNUSUAL FIRE AND EXPLOSION HAZARD: When heated to high temperatures, lead emits highly toxic fumes.

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Section 6 - Environmental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Solid at room temperature. If in molten state allow to cool and solidify and then scrape up.

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Section 7 - Handling and Storage

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

No special requirements for storage. Read all container labeling. Food and drink should not be consumed or tobacco products used, nor cosmetics applied in areas where core solders may be used. Always wash hands after handling core solder and before eating, drinking or smoking.

OTHER PRECAUTIONS: Containers: Since empty containers may retain product residues (vapors, liquid or solid) all labeled hazard precautions must be observed. FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

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Section 8 - Exposure Controls/Personal Protection

RESPIRATORY: If any threshold limit value is exceeded, use NIOSH/MSHA approved respirator.

EYEWEAR: When soldering use safety goggles.

CLOTHING/GLOVES: Not usually necessary.

VENTILATION: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure levels below TLV's.

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Section 9 - Physical and Chemical Properties

(PUBLISHED OR ESTIMATED VALUES)

BOILING POINT(Deg F)

(760 mm Hg) : NA

VAPOR PRESSURE

(mm Hg at 20 Deg. C) : NA

VAPOR DENSITY(Air=1) : NA

SOLUBILITY IN WATER : Insoluble

APPEARANCE AND ODOR : Silver-gray metal wire, odorless, various shapes and sizes.

SPECIFIC GRAVITY

(H2O=1)(@77 deg F) : NA

% VOLATILE BY WEIGHT : NA

EVAPORATION RATE : NA

pH : NA

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Section 10 - Stability and Reactivity

STABILITY: Stable

CONDITIONS TO AVOID: None

INCOMPATIBILITY(Materials to Avoid): Oxidizing materials, strong acids

HAZARDOUS DECOMPOSITION PRODUCTS: See section 11.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: None

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Section 11 - Toxicological Information

PRODUCT COMPOSTION: (core wire solder)
Rosin Flux: 1-4% Solder Alloy: 96-99%

ALLOY COMPOSTION: (See product label for actual compostion)
Solder core alloy compostion vary widely, therefore no weight percent is given. Some typical alloy compostions are:
Tin 60%, Lead 40% - Tin 62%, Lead 36%, Silver 2% - Tin 95%, Antimony 2%

ROSIN TOXICITY: Oral LD 50 (RATS) > 5000mg/Kg

LEAD TOXICITY: Molten solder alloys do not produce significant lead fumes below 900 deg F. Exposure to high levels of airborne or ingested lead may produce symptoms of anemia, insomnia, weakness, constipation, nausea and abdominal pain. Prolonged exposure may result in kidney and nervous system involvement. Women of child bearing age should avoid exposure to lead due to post-natal effects.

TIN, SILVER, BISMUTH, ANTIMONY AND INDIUM TOXICITY: Overexposure to these elements is not expected.

REACTIVITY DATA (CONTINUED):
HAZARDOUS DECOMPOSTION PRODUCTS: The smoke from a soldering operation using rosin core solder may include such compounds as carbon monoxide, abietic acid, aliphatic aldehydes, and diterpene acids.

Section 12 - Ecological Information

Not available.

Section 13 - Disposal Considerations

WASTE DISPOSAL: The alloy portion is reclaimable.

Must be in accordance with Federal, State and Local Laws and Regulations.

Section 14 - Transport Information

D.O.T. HAZARD CLASS: Not regulated.

Section 15 - Regulatory Information

CALIFORNIA STATE PROPOSITION 65: WARNING!! This product contains LEAD known to the State of California to cause birth defects or other reproductive harm.

TOXIC SUBSTANCE CONTROL ACT (TSCA) STATUS: All ingredients of this product are listed on the TSCA inventory.

SARA TITLE III(SECTION 313): Components that may be present in this product at a level which could require reporting under the statute are:
Lead - Silver - Antimony

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Section 16 - Other Information

The information contained herein is based on data considered 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.