



MATERIAL SAFETY DATA SHEET

CHROMATE INDUSTRIAL CORPORATION®

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**FOR CHEMICAL
EMERGENCY**

Call ChemTrec day/night:
1-800-424-9300

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SOLDER LINK SLUGS

DATE PREPARED: May 26, 2008

PART NUMBER: 6270-6276

DOT Hazard Classification: Not Regulated

PRODUCT TYPE: solder flux

CHEMICAL FAMILY: not listed.

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SECTION 2 – COMPOSITION, INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Wt%	OSHA PEL	ACGIH TLV TWA
LEAD	7439-92-1*	**	0.05 mg/m3	0.15 mg/m3
TIN	7440-31-5	**	2.0	2.0
SILVER	7440-22-4*	**	0.01	0.1
BISMUTH	7440-69-9	**	NE	NE
ANTIMONY	7440-36-0*	**	0.5	0.5
ROSIN	8050-09-7	<3	NE	NE

NOTES: * THIS CHEMICAL IS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 & TITLE III OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

** COMPOSITION AND WIGHT % OF SOLDER ALLOYS VARIES WIDELY AND CAN BE DETERMINED BY PRODUCT LABEL. FLUX IN CORE IS TYPICALLY 1-3% BY WEIGHT.

SECTION 3 – HAZARDS IDENTIFICATION

EXPOSURE LIMITS:

Ingested LD: N/E

Inhaled LC: NE

Primary exposure during soldering is to evaporated solvent which may contain droplets of rosin and/or other organic decomposition.

PRIMARY ROUTES OF EXPOSURE:

SKIN: NE

EYES: Yes

INHALATION: Yes

INGESTION: Yes

TARGET ORGANS: Flux fumes: eyes, mucous membranes and pulmonary system. Ingestion of lead metal can affect kidneys, gastrointestinal, reproductive and neurological systems.

EFFECTS OF ACUTE (SEVERE SHORT-TERM) EXPOSURE:

Inhalation: Flux fumes during soldering may cause irritation and damage of mucous membranes and pulmonary system.

Skin Contact: Possible local irritation by contact with flux or fumes.

Skin Absorption: None.

Eye Contact: Irritation from contact with smoke from soldering.

Ingestion: Not likely to occur.

EFFECTS OF CHRONIC (LONG-TERM) EXPOSURE:

Breathing fumes during soldering may cause pulmonary irritation, headache and irritation of mucous membranes. Repeated ingestion of lead can result in systemic poisoning.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Pre-existing conditions of the lungs, diseases of blood and blood-forming organs, kidneys, nerves and possibly reproductive system.

CARCINOGEN:

	NTP	OSHA	IARC	
Product Use: Soldering flux in cored solder for electrical or electronic applications.	N/A	N/A		Yes

NFPTA Rating:	Health: 1	Flammability: 2	Reactivity: 0	Special: N/A
HMIS Rating:	Health: 1	Flammability: 2	Reactivity: 0	Personal Protection: yes

WHMIS: Class D, Division 2, Subdivision B

TDO: Not Regulated

N/A — NOT APPLICABLE

N/D — NOT DETERMINED

N/E — NONE ESTABLISHED

N/R — NOT REGULATED

This MSDS complies with OSHA'S Hazard Communication Standard 29 CFR 1910.1200 and OSHA Form 174

REV. 10/06/08 BJM

SECTION 4 – FIRST AID MEASURES

EYE CONTACT: For burns, flush immediately with cool water. For fume irritation use eye drops and remove from exposure.

SKIN CONTACT: For burns, flush immediately with cool water. If a rash develops from flux fumes, remove person from exposure and wash skin with soap and water.

INHALATION: Remove person from exposure to fumes.

INGESTION: N/A

****SEEK MEDICAL ASSISTANCE FOR FURTHER TREATMENT, OBSERVATION AND SUPPORT, IF NEEDED.**

SECTION 5 – FIRE FIGHTING MEASURES**FLAMMABLE PROPERTIES**

Flashpoint °F/°C: N/L

Flash Point Method: NA

Flammable Limits in Air- Lower (%): NA

Flammable Limits in Air-Upper (%): NA

Autoignition Temperature °F/°C: NA

Extinguishing Media: NA

Protection of Fire-Fighters

Special Fire-Fighting Procedures: Wear approved positive-pressure self-contained breathing apparatus and protective clothing. Vapor may cause flash fire. No explosion hazards identified. No static discharge noted.

Hazardous Combustion Products: Melted solder may liberate Carbon monoxide, carbon dioxide, lead oxide fumes.

Aerosol Comments: Not Applicable

SECTION 6 – ACCIDENTAL RELEASE MEASURES

IF SPILLED OR RELEASED: Melted solder will solidify on cooling and can be scraped up. Use caution to avoid breathing fumes if a gas torch is used to cut up large pieces.

SECTION 7 – HANDLING AND STORAGE

WASTE DISPOSAL METHODS: Solder can be reclaimed.

CAUTION: Empty containers may contain product residue. Observe all label precautions.

PRECAUTIONS TO BE TAKE IN HANDLING AND STORAGE: Store away from sources of sulfur. Wash hands after handling solder containing lead before eating or smoking. Avoid breathing fumes during soldering. Do not place flux cored solder into a hot solder pot because the flux may ignite.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

RESPIRATORY PROTECTION: Usually not required. When ventilation is not sufficient to remove fumes from the breathing zone, a cartridge type respirator should be worn.

PROTECTIVE GLOVES: Not usually required.

EYE PROTECTION: When soldering, use goggles or face shield.

VENTILATION TO BE USED: Provide adequate exhaust ventilation (general and/or local) to meet TLV requirements.

OTHER PROTECTIVE CLOTHING AND EQUIPMENT: None.

HYGIENIC WORK PRACTICES: Wash hands thoroughly after handling solder containing lead before eating or smoking.

SECTION 9 – PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance: Silver gray metal in wire, ribbon or performed shape With a core of flux	pH Value: N/D
Odor: N/E	Vapor Pressure (mm Hg at 20°C): N/A
Boiling Point (760mmHg): NA °F NA °C	Vapor Density (Air=1): N/A
Solubility in Water: 0%	Melting/Freezing Point: N/A °F N/A °C
Molecular Weight: N/L	Bulk Density: Not listed
Viscosity: N/L	Evaporation Rate(butyl acetate=1): N/A
	Specific Gravity (H2O=1 at 24°): <1
VOC Content: (%) N/A g/liter	Decomposition Temperature: Not listed

SECTION 10 – STABILITY AND REACTIVITY**STABILITY:** STABLE.**Incompatibility (MATERIALS TO AVOID):** Strong acid, strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: When heated to soldering temperatures, the solvent in the flux will boil away and carry up droplets of rosin and thermal degradation products such as aliphatic Aldehydes, acids and terpenes. No lead is detected in fumes from soldering below 1000° F (537°C).

HAZARDOUS POLYMERIZATION: Will not occur.**SECTION 11 – TOXICOLOGICAL INFORMATION**

Data on this product is unavailable.

SECTION 12 – ECOLOGICAL INFORMATION

Data on this product is unavailable.

SECTION 13 – DISPOSAL CONSIDERATIONS**Waste Disposal Methods:** Solder can be reclaimed.**Caution:** Empty containers may contain product residue. Observe all label precautions.**SECTION 14 – TRANSPORT INFORMATION**

Data on this product is unavailable.

SECTION 15 – REGULATORY INFORMATION

If the solder contain lead, these precautions are applicable.

Lead and its compounds have tentatively been found to be a Class B-2 Carcinogen by the USEPA Carcinogen Assessment Group. IARC lists lead and its compounds as teratogens.

California Proposition 65 requires a posted warning that lead can cause birth defects or other reproductive harm.

SECTION 16 – OTHER INFORMATION

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Vendor assumes not responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in this MSDS. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of material.

Conforms to 29 CFR 1910, 1200, OSHA
ANSI Z129.1-1988 American National Standard for Hazardous Industrial Chemicals

N/A — NOT APPLICABLE N/D — NOT DETERMINED N/E — NONE ESTABLISHED N/R — NOT REGULATED
This MSDS complies with OSHA'S Hazard Communication Standard 29 CFR 1910.1200 and OSHA Form 174