

## SAFETY DATA SHEET

SDS Name: 065-017-027

Tin Zinc Lead Multipurpose Solder and Galvanizing Repair

### SECTION I: PRODUCT AND COMPANY INFORMATION

Tin-Zinc-Lead Multipurpose Solder and Galvanizing Repair, Part no. 065-017-027

|      |           |           |
|------|-----------|-----------|
|      |           |           |
| Tin  | 7440-31-5 | 231-141-8 |
| Zinc | 7440-66-6 | 231-175-3 |
| Lead | 7439-92-1 | 231-100-4 |

Manufactured for: HUB Industrial Supply, LLC P.O. Box 3609, Lake City FL  
Contact: Telephone: 800-743-9401 Email: customerservice@hubindustrial.com  
Emergency Contact: 800-424-9300 CHEMTREC

### SECTION II: HAZARD INFORMATION

Acute toxicity, inhalation (Category 3)  
Sensitization, respiratory (Category 1)  
Germ cell mutagenicity (Category 2)  
Carcinogenicity (Category 1A,1B)  
Reproductive toxicity (Category 2)  
Specific target organ toxicity – repeated exposure (Category 1)



GHS08 Health Hazard

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H340 – May cause genetic defects  
H350 – May cause cancer  
H361 – May damage fertility or the unborn child.  
H373 - May cause damage to organs through prolonged or repeated exposure.



GHS07

Harmful if swallowed.



GHS07



GHS08

Label Elements: Hazard Pictograms

Signal Word: **Danger**

Hazard-determining components of labeling: LEAD (Pb)

**SAFETY DATA SHEET**

SDS Date: 11/14/2023

SDS Name: 065-017-027

Tin Zinc Lead Multipurpose Solder and Galvanizing Repair

Page 2 of 5

**Hazard Statements:**

H302 - Harmful if swallowed.  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H317 - May cause an allergic skin reaction.  
H341 - May cause genetic defects.  
H351 - May cause cancer.  
H361 - May damage fertility or the unborn child.  
H373 - May cause damage to organs through prolonged or repeated exposure.  
H413 - May cause long lasting harmful effects to aquatic life.

**Precautionary Statements:**

P260 - Do not breathe dust/fumes.  
P263 - Avoid contact during pregnancy/while nursing.  
P264 - Wash thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P305+P351+P338 - IF IN EYES: Flush with water for at least 15 minutes to remove irritant. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician.  
P304+P341 - IF INHALED: Terminate exposure and remove to fresh air. Call physician; advise of chemical composition (section III).  
P302+P352 - IF ON SKIN: Wash thoroughly with soap and water to remove any residue. If a rash develops, call a physician.  
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

**SECTION III: COMPOSITION / INGREDIENTS**

\*(Hazardous components 1% or greater; Carcinogens 0.1% or greater)

| Component  | CAS Number | ECHA Number | OSHA PEL                             | ACGIH TLV                            | Density<br>lbs/in <sup>3</sup> & g/cm <sup>3</sup> | % (optional) |
|------------|------------|-------------|--------------------------------------|--------------------------------------|--|--------------|
| Tin (Sn)   | 7440-31-5  | 231-141.8   | 2 mg/m <sup>3</sup>                  | 2 mg/m <sup>3</sup>                  | .264 & 7.307                                       | 10 – 77      |
| Zinc (Zn)  | 7440-66-6  | 231-175-3   | 5mg/m <sup>3</sup>                   | 5mg/m <sup>3</sup>                   | .257 & 7.114                                       | 3 – 28       |
| *Lead (Pb) | 7439-92-1  | 231-100-4   | .05 mg/m <sup>3</sup><br>(Dust&Fume) | .15 mg/m <sup>3</sup><br>(Dust&Fume) | .4094 & 11.332                                     | 2.5 - 63     |

NA = Not Applicable

NE = Not Established

NAIF = No Applicable Information Found

\*The OSHA standard limit for occupational exposure to lead as referenced in CFR Title 29, Part 1910.1025 is 50 micrograms/cubic meter based on an eight hour time-weighted average.

This standard states that, when the air of work-rooms contains regularly not more than 50 micrograms of inorganic lead and its inorganic compounds per cubic meter of air, as measured by prescribed methods, cases of lead intoxication will not occur.

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Federal law prohibits use of Lead/Cadmium solders in any private or public potable (drinking) water supply system.

No other hazardous material is present in concentrations greater than 1% (0.1% for Carcinogens)

**SECTION IV: FIRST AID MEASURES**

Ingestion: Drink large quantities of water - induce vomiting.  
Call a physician at once; advise of chemical composition (section III).  
Skin: Wash thoroughly with water to remove any residue. If a rash develops, call a physician.  
Inhalation: Terminate exposure and remove to fresh air. Call physician; advise of chemical composition (section III).  
Eyes: Flush with water for at least 15 minutes to remove irritant. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician.

## SAFETY DATA SHEET

SDS Name: 065-017-027

Tin Zinc Lead Multipurpose Solder and Galvanizing Repair

SDS Date: 11/14//2023

Page 3 of 5

### SECTION V: FIRE FIGHTING MEASURES

Flash point & Methods Used: N/A Auto Ignition Temperature: N/A  
Flammability Limits: (in air, % by volume) LEL: N/A and UEL: N/A  
Extinguisher Media: CO<sub>2</sub> or dry chemical extinguisher.

DO NOT USE WATER ON MOLTEN METAL:  
LARGE FIRES MAY BE FLOODED WITH WATER FROM A DISTANCE

Special Fire Fighting Procedures Use NIOSH/MSHA -approved self-contained breathing apparatus and full protective clothing if involved in fire.

Unusual Fire and Explosion Hazards Metal products are not a fire hazard. However, finely divided dust may form explosive mixture with air.

NEVER DROP WATER OR LIQUIDS INTO MOLTEN SOLDER.  
**\*Do not plunge damp or wet solder bars/pieces into molten solder**

### SECTION VI: ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is spilled or released:

- Solder is solid / recyclable
- Vacuuming is recommended for accumulated metal dust from saw/grind operations.

### SECTION VII: HANDLING AND STORAGE

Precautions to be taken in handling and storage:

- Dry storage; ambient temperature

Other Precaution / Special Handling:

- Wet or moist ingot(s) WILL present an explosion hazard when submerged in molten solder.  
**\*AVOID FIRE/EXPLOSION RISKS. Always preheat ingot before charging into furnace.**

### SECTION VIII: EXPOSURE CONTROLS / PERSONAL PROTECTION



Respiratory Protection: Use NIOSH-approved breathing apparatus to prevent exposure to dusts and fumes.  
Eye Protection: Approved safety glasses/welding goggles, appropriate to your procedure, should be worn.  
Ventilation: Local Exhaust: YES; Mechanical: YES Special: Conform to your regulatory statutes.  
Other: Standard protective equipment used in soldering (/applicable) operations.  
\*Protective gloves are recommended, especially for high temperature applications to prevent burns. \*Conform to all local, state, federal regulations.

See also: 29 CFR 1910.132 - 29 CFR 1910.140. *Personal Protective Equipment*  
29 CFR 1910.251 - 29 CFR 1910.257. *Welding, Cutting and Brazing*

**SAFETY DATA SHEET**

SDS Date: 11/14//2023

SDS Name: 065-017-027

Page 4 of 5

Tin Zinc Lead Multipurpose Solder and Galvanizing Repair

**SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES**

|                                       |  |
|---------------------------------------|--|
| Boiling Point:                        | NAIF   |
| Melting Point:                        | 350 - 550°F / 177 - 288°C                                    |
| Vapor Pressure (mm Hg.):              | LEAD ONLY: Health Effects ONLY >500°C                        |
| Vapor Density (AIR = 1):              | N/A  |
| Density:                              | .3353lb/ cu in. or 9.281g/ml                                 |
| Solubility in Water:                  | 0 (solid)  |
| Evaporation Rate (Butyl Acetate = 1): | N/A  |
| Appearance and Odor:                  | Lustrous, silver metal; odorless / various shapes and sizes. |

**SECTION X: STABILITY AND REACTIVITY**

|                                       |   |
|---------------------------------------|---|
| Stability:                            | Stable  |
| Conditions to avoid:                  | None  |
| Incompatibility (materials to avoid): | Strong Acids, Strong Alkalis                  |
| Hazardous Decomposition Products:     | None; Hazardous Polymerization will not occur |

**SECTION XI: TOXICOLOGY INFORMATION**

|            |   |
|------------|---|
| Tin (Sn):  | Elemental Tin is NOT generally considered to be toxic.  |
| Zinc (Zn): | Excessive inhalation of zinc oxide fumes may produce symptoms known as "zinc shakes" which are flu-like and usually cease when the individual is removed from the source. |
| Lead (Pb): | Chronic exposure to high levels of airborne or ingested lead may result in anemia, insomnia, weakness, constipation, nausea, and abdominal pain.                          |

IT IS UNLIKELY THAT NORMAL EXPOSURE (USING APPROPRIATE PROTECTIVE EQUIPMENT) WOULD RESULT IN ILLNESS.

\*0 = Insignificant    1 = Slight    2 = Moderate    3 = High    4 = Extreme

|                    | Health | Flammability | Reactivity | Special |
|--------------------|--------|--------------|------------|---------|
| <b>NFPA Rating</b> | 1      | 0            | 0          | 0       |
| <b>HMIS Rating</b> | 1      | 0            | 0          | 0       |

**SECTION XII: ECOLOGY INFORMATION**

This product will not biodegrade. It will oxidize if left out in the elements, but will not affect the surrounding ecology.

**SECTION XIII: DISPOSAL CONSIDERATION****Waste Disposal Method**

- Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Disposal must be made according to official regulations. Dispose of according to federal, state, local, international, and OSHA regulations.

**SECTION XIV: TRANSPORT INFORMATION**

**Ground - DOT Proper Shipping Name: Solder**  
Not regulated for transport by US DOT.

**Air - IATA Proper Shipping Name: Solder**  
Not regulated for air transport by IATA.

**SECTION XV: REGULATORY INFORMATION****SARA Title III Program:**

- This product contains the following toxic chemicals subject to the reporting requirements of EPCRA of 1986 and 40 CFR 372

| CHEMICAL NAME           | CAS NO.   | ECHA NO.  | % / WEIGHT |
|-------------------------|-----------|-----------|------------|
| Zinc (Zn) – Fume & Dust | 7440-66-6 | 231-175-3 | 3 – 28%    |
| Lead (Pb)               | 7439-92-1 | 231-100-4 | 2.5 – 63%  |

**SAFETY DATA SHEET****SDS Date: 11/14//2023**

SDS Name: 065-017-027

Tin Zinc Lead Multipurpose Solder and Galvanizing Repair

Page 5 of 5

**UNITED STATES**

HCS Classification: Toxic Material, Irritating material, carcinogen, target organ effects.

U.S. Federal Regulations: All ingredients comply with applicable rules or orders under US TSCA.

All components are listed or exempted.

**SARA 313****Substance Name**

Form R - Reporting Requirements:

Lead

Supplier Notification:

Lead

California Prop. 65: This product contains a substance known to the State of California to cause cancer and birth defects or other reproductive harm. More information at [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

WHMIS (Canada): Class D-2A: Material causing other toxic effects (very toxic). CEPA DSL: Lead.

Reach Directive 1907/2006: Contains Lead, a Substance of Very High Concern (SVHC). Some high Lead alloys of KappLead solders may be covered by REACH Exemption 7(a): Lead in high melting temperature type solders (i.e. Lead- based alloys containing 85 % by weight or more lead).

**SECTION XVI: OTHER INFORMATION**

This information must be included in all SDS that are copied and distributed for this material.

**GOOD HOUSEKEEPING PROCEDURES SHOULD BE MAINTAINED.  
PERSONNEL SHOULD WASH THOROUGHLY BEFORE SMOKING OR EATING  
FOOD AND DRINK SHOULD NOT BE CONSUMED, TOBACCO PRODUCTS USED, OR COSMETICS  
APPLIED IN AREAS WHERE EXPOSURES EXIST.**

Please retain this sheet for your files. Kapp Alloy maintains a file of Safety Data Sheets (SDS) for each alloy produced in compliance with Federal OSHA Hazard Communication Standard (29 CFR 1910.1200) & various right-to-know laws.

The information and recommendations contained within this publication have been compiled from sources believed to be reliable and to represent the best information available to Kapp Alloy and Wire, Inc. at the time of issue. It is our policy to include an SDS with initial orders for each product. This submission is to become a matter of record and need not accompany subsequent shipments for the same product to the same customer. The information contained on this sheet is intended solely for employee health and safety education and not for contract specification purposes. No warranty, guarantee, or representation is made by Kapp Alloy and Wire, Inc., nor does Kapp Alloy and Wire, Inc. assume any responsibility in connection there within; nor can it be assumed that all acceptable safety measures or other safety measures may not be required under particular or exceptional conditions or circumstances. Should you need additional information, contact us.