

# NATIONAL SOLDER CO

## Material Safety Data Sheet

OSHA's Hazard Communication Standard

### 63/37 Tin/Lead Alloys

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#### Section I:

NATIONAL SOLDER CO  
13 ARKIN STR  
INDUSTRIES EAST  
GERMISTON  
1400

Telephone 011-873 9000

#### Section II: Hazardous Ingredients/Identity information

| Hazardous Component | CAS #     | OSHA TWA  | ACGIH TWA | Other limits |
|---------------------|-----------|-----------|-----------|--------------|
| Tin                 | 7440-31-5 | 2mg/M3    | 2mg/M3    | NE           |
| * + Lead            | 7439-92-1 | 0.05mg/M3 | 0.05mg/M3 | NE           |
| % as specified      |           |           |           |              |

Only those ingredients listed in this section have been determined to be hazardous as defined in 29CFR 1910.1200. An ingredient marked with an asterisk(\*) is also listed in 29CFR 1910.1200(D) #4 as a known or suspected cancer hazard.

+ denotes a chemical regulated as toxic by the Environmental Protection Agency (EPA) as outlined in 40CFR Part 372 (section 313)

#### Section III: Physical/Chemical Characteristics

Specific Gravity: 9.0  
Vapour Pressure (mm Hg): 760 @ BP  
Vapour Density: NE  
Solubility in water: insoluble  
Appearance and odour: silver grey solid, odourless

Melting Point: 184 C  
Evaporation Rate  
(butyl acetate=1): < 1

#### Section IV: Fire and Explosion Hazard Data

Flash Point: non flammable  
Flammable limits l<sub>el</sub>: NA  
u<sub>el</sub>: NA  
Extinguishing media: all  
Special fire fighting procedures: use self-contained breathing apparatus  
Unusual Fire and Explosion Hazards: May release toxic metal & oxide fumes. High concentrations of dust may present explosion hazard.  
Water trapped below molten metal may explode thus spattering molten metal.

## **Section V: Reactivity Data**

Stability: STABLE Conditions to avoid: none  
Incompatibility (materials to avoid): oxidizing materials, turpentine, acids, and chlorides.  
Hazardous Decomposition or By-products (incomplete combustion): toxic lead & metal oxide fumes  
Hazardous Polymerization: WILL NOT OCCOUR Conditions to avoid: any

## **Section VI: Health Hazard Data**

Routes of entry: Inhalation? Yes Skin? No Ingestion? Yes

Health Hazards (acute and chronic): Contact with dust & fumes may cause skin, eye and respiratory irritation. Ingestion and/or inhalation of material or fumes may result in "metal fume fever", flu like symptoms, insomnia, muscle weakness, nausea and abdominal pain. Gross inhalation or ingestion may be toxic and can result in death. Symptoms of toxicity may take hours or days to manifest. Chronic exposures, inhalation or ingestion, may result in kidney, red blood cell, reproductive & nervous system effects. Health effects may be Cumulative over more exposure. Studies show that health risks vary by individual.

Minimize exposure as a precaution.

Carcinogenicity: not determined NTP? No IARC Monographs? Lead-suspect

Signs and symptoms of exposure: Inhalation-Nose & throat irritation, headache, dizziness, difficulty breathing, coughing, flu like symptoms, metallic taste in mouth. Ingestion- nausea, vomiting, cramps. Skin-redness, burning, rash. Eye-redness, tearing, blurred vision.

Medical Conditions Aggravated by exposure: Blood, kidney, reproductive & nervous system conditions

Emergency first aid procedures:

Skin: Flush with water immediately - Seek medical attention if burns are present.

Eyes: Flush with water for 15 minutes - Seek medical attention

Ingestion: Drink large amounts of water, induce vomiting if practical- seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air. Support respiration if required - Seek medical attention.

## **Section VII: Precautions for Safe Handling and Use**

Steps to be taken if material is released or spilled: Vacuum, absorb or flush in to a chemical sewer. Do not use any method which will generate dust.

Waste Disposal Method: dispose of in accordance with all local state regulations

Other Precautions: Avoid skin & eye contact, inhalation & ingestion of material or fumes.

Wash thoroughly after use. Wash contaminated clothing before reuse. Avoid eating or smoking in lead use area. Keep away from children.

## **Section VIII: Control Measures**

Respiratory Protection (type): Dust mask for particulates. Metal fume/HEPA respirator for fumes.

Ventilation Local Exhaust preferred      Special: HEPA filters required  
Mechanical: OK                                 Other: NE

Protective Gloves: impervious                                 Eye Protection: Goggles or face shield

Other Protective Clothing or Equipment: as required to avoid contact.

Work/Hygienic Practices: Wash after use. Follow good industrial hygienic practices.

## **Section IX: Additional Information**

DOT Hazard Classification: Non-hazardous

NFPA Classification (NFPA 325M, 8th edition) (Health, Flammability, and Reactivity): 2-0-0

### **Delivery Information**

International delivery regulation: LATA- Dangerous Goods Regulation Not Restricted.

UN code: Not Regulated

Domestic Delivery Regulation: None known

Special delivery method and precaution: None known

### **Law and Regulation**

Conform to regulation; 1. SABS regulation.

harmful materials. 2. Identification rules for hazardous and

facility requirement. 3. Standards for waste disposal treatment and

4. Road traffic safety rules.

### **Additional Information**

Reference: MSDS database, CCINFO CD 98-2, NIOSH/OSHA, Occupational Health Guidelines for Chemical Hazards, 1981.

Prepared by: Kirit Daya

OTHER: This product contains components known to the state of California to cause cancer or reproductive harm.

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NE = not established NA = not applicable