

NATIONAL SOLDER CO

Material Safety Data Sheet

OSHA's Hazard Communication Standard

22% Tin/Lead Alloys

Section 1: Product and Manufacturers Information

22% Tin/Lead Alloys (sticks, wiping metal)

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Section 2: Hazardous Ingredients/Identity information

Chemical characteristics : Tin/Lead alloy
Hazardous Component Classification and Figure

Contains Lead - Harmful (G)

<u>Hazardous Ingredients Name</u>	<u>WT%</u>	<u>C.A.S No..</u>	<u>Organic Standard</u>
Tin /Sn	21-23	7440-31-5	NE
Lead /Pb**	79-77	7439-92-1	

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 3: 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 many exposures. Studies show that health risks vary by individual.

Minimize exposure as a precaution. See OSHA 29CFR 1910.1025 (subpart Z) for more information.

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

Section 4: 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 5: Fire and Explosion Hazard Data

Flash Point: non flammable

Flammable limits lel: NA

uel: 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 6: 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.

Section 7: Precautions to be taken in handling and storage:

Handling: Working temperature shall not exceed 500 degrees celcius in which persons shall wear protective equipment to avoid inhaling gas, powdery dust.

Storage: Store in waterproof and non polluted area. Put warning label and check regularly.

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 8: Protective measures against exposure

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 9: Physical/Chemical Characteristics

Boiling Point: Specific Gravity water: 10.0
Vapor Pressure (mm Hg):NE Melting Point: 184 deg.cel.
Vapor Density: NE
Solubility in water: insoluble
Appearance and odor: silver grey solid, odorless

Section 10: Stability and Reactivity Data

Stability : STABLE Conditions to avoid : none
Incompatibility (materials to avoid): oxidizing materials, turpentine, acids, chlorides.
Hazardous Decomposition or Byproducts (incomplete combustion): toxic lead & metal oxide fumes
Hazardous Polymerization: WILL NOT OCCUR Conditions to avoid: none

Section 11. Toxicological Properties

Level of Toxicity- Acute Effect: possibly cause irritation to eyes,nose,throat and skin.
Local Effect none known.
Sensitivity: none known.
Effects of chronic exposure: Patients with skin or respiratory problems are likely to be harmful.
Special effects: None known.

Section 12.Ecological Data

Probable effect to enviroment :
1. Soil dispersal
2. Water dispersal
3. Air dispersal

Section 13. Waste Disposal

Waste disposal method: Solder metal can be recycled by reclamation

Section 14. Delivery information

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

UN Code: Not Regulated

Domestic delivery regulation: Road teaffic Safety,Vessel,and railroad regulations on dangerous goods

Special Delivery method and precaution: None known

Section 15. Law and Regulation

Conform to regulation: 1. Labour Safety & Sanitary Device Regulation
2.Standards for the density of hazardous materials for labour working enviroment
3.Identification rules for hazardous and harmful materials
4.Stanards for waste disposal treatment and facility requirement
5.Road traffic safety rules.

Section 16: Additional Information

DOT Hazard Classification: Non-hazardous
NFPA Classification (NFPA 325M, 8th edition) (Health, Flammability, Reactivity): 2-0-0

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