BOW SOLDER PRODUCTS CO INC -- TIN/LEAD -- 3439-01-004-9755 Product ID:TIN/LEAD MSDS Date: 09/25/1997 FSC:3439 NIIN:01-004-9755 Status Code:A MSDS Number: CKGLK === Responsible Party === Company Name: BOW SOLDER PRODUCTS CO INC Address:1 CROSSMAN ROAD City:SAYREVILLE State:NJ ZIP:08772 Country:US Info Phone Num:732-316-2100 Emergency Phone Num:800-526-4577 CAGE:52329 === Contractor Identification === Company Name: BOW ELECTRONIC **SOLDERS** Address: 1 CROSSMAN ROAD Box:City:SAYREVILLE State:NJ ZIP:08872 Country:US Phone:732-316-2100/ FAX: 732-316-2177 CAGE:52329

======= Composition/Information on Ingredients ========

Ingred Name:TIN CAS:7440-31-5 RTECS #:XP7320000 Minumum % Wt:0. Maxumum % Wt:100. OSHA PEL:2 MG/M3 ACGIH TLV:2 MG/M3

Ingred Name:LEAD CAS:7439-92-1 RTECS #:OF7525000 Minumum % Wt:0. Maxumum % Wt:100. OSHA PEL:0.05 MG/M3 ACGIH TLV:0.15 MG/M3 EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB

Health Hazards Acute and Chronic:ACUTE: SEVERE SHORT-TERM OVEREXPOSURE MAY LEAD TO CENTRAL NERVOUS SYSTEM DISORDERS. IT SHOULD BE RECOGNIZED THAT EXPOSURES OF THIS MAGNITUDE IN AN INDUSTRIAL EXVIRONMENT ARE EXTREMELY UNLIKELY. CHRONI C: PROLONGED OVEREXPOSURE TO LEAD CAN RESULT IN SYSTEMIC POISONING, MAY CAUSE DAMAGE TO THE BLOOD-FORMING, NERVOUS, KIDNEYS, AND REPRODUCTIVE SYSTEMS. DAMAGE MAY INCLUDE REDUCED FERTILITY IN BO

TH MEN AND

WOMEN, DAMAGE TO THE FETUS OF EXPOSED PREGNANT WOMEN, ANEMIA, MSUCULAR WEAKNESS AND KIDNEY DYSFUNCION.

- Explanation of Carcinogenicity: THIS PRODUCT HAS NOT BEEN LISTED AS A SUSPECT CARCINOGEN BY NTP, IARC OR OSHA.
- Effects of Overexposure:SYMPTOMS CHARCATERIZED BY DROWSINESS, SEIZURES, COMA AND DEATH. SYPTOMS OF METALLIC TASTE, ANEMIA, INSOMNIA, WEAKNESS, CONSTIPATION, ABDOMINAL PAIN, GASTROINTESTINAL DISORDERS, JOINT AND MUSCLE PAIN, AND MUSCULAR WEAKNESS.

Med

ical Cond Aggravated by Exposure:DISEASES OF THE BLOOD AND BLOOD FORMING ORGANS, KIDNEY, NERVOUS AND POSSIBLY REPRODUCTIVE SYSTEMS.

First Aid:INHALATION: REMOVE FROM EXPOSURE AND CALL A PHYSICIAN. SKIN: WASH AFFECTED AREAS WITH SOAP AND WATER. IF BURNS SHOULD OCCUR FROM MOLTEN METAL TREAT FOR BURN AND GET IMMEDIATE MEDICAL ASSISTANCE. EYE C ONTACT: FLUSH EYES WITH WATER FOR 15 MINUTES, CALL A PHYSICIAN. IN

GESTION: DRINK LARGE QUANTITIES OF WATER. CALL A PHYSICIAN.

========== Fire Fighting Measures ===============

Extinguishing Media:USE CO2 OR DRY CHEMICAL ON SURROUNDING FIRE. DO NOT USE WATER ON FIRE WHERE MOLTEN METAL IS PRESENT Fire Fighting Procedures:USE NIOSH/MSHA APPROVED SELF CONTAINED BREATHING APPRATUS AND FULL BODY PROTECTIVE CLOTHING Unusual Fire/Explosion Hazard:MOLTEN METALS PRODUCE FUME OR VAPORS THAT MAY BE TOXIC AND/OR RESPIRATORY IRRITANTS. R

EACTS VIOLENTLY WITH OXYDIZING AGENTS.

======== Accidental Release Measures ===========

Spill Release Procedures: ANY METHOD THAT KEEPS DUST TO A MINIMUM IS ACCEPTABLE. VACUUMING IS PREFERRED. USE OF APPROVED RESPIRATORT PROTECTION WHERE POSSIBILITY OF DUST/FUME EXPOSURE EXISTS. DO NOT USE COMPRESSED AIR FOR CLEA NING.

=========== Handling and Storage ===============

Handling and Storage Precautions: USE OF APPROVED RESPIRATORS IS

RED FOR APPLICATIONS WHERE ADEQUATE VENTILATION CANNOT BE PROVIDED. ACTIVITIES WHICH GENERATE DUST OR FUME SHOULD BE AVOIDED. WHEN MELTED, THE TEMPERATURE SHOULD BE KEPT AS LOW AS POSSIBLE.

Other Precautions:OVERHEATING OF ALLOY CAN PRODUCE METAL FUMES AND OXIDES. MACHINING OPERATIONS SUCH AS GRINDING, SAWING, OR BUFFING CAN GENERATE AIRBORN PARTICULATES IN THE WORK AREA. EXPOSURE LEVELS INDICATED ARE REL AVENT TO THESE AND OTHER OPERATIONS.

===== Exposure Controls /Personal Protection =======

Respiratory Protection:WHERE AIRBORNE EXPOSURES MAY EXCEED OSHA/ACGIH PERMISSIBLE AIR CONCENTRATIONS, THE MINIMUM RESPIRATORY PROTECTION RECOMMENDED IS A NEGATIVE PRESSURE AIR PURIFYING RESPIRATOR WITH CARTRIDGES THAT ARE N IOSH/MSHA APPROVED AGAINST DUST, FUMES, AND MISTS HAVING A TWA NOT LESS THAN 0/05 MG/CU M

Ventilation:LOCAL EXHAUST VENTILATION IS RCOMMENDED FOR DUST AND/OR FUME GENERATION OPERATIONS WHERE AIRBORNE EXPOSURES MAY EXCEE D

PERMISSIBLE AIR CONCENTRATIONS.

Protective Gloves: GLOVES RECOMMENDED.

Eve Protection: SAFETY GLASSES RECOMMENDED.

Other Protective Equipment:GLOVES AND OTHER PROTECTIVE CLOTHING RECOMMENDED IF SKIN CONTACT IS APPRECIABLE.

Work Hygienic Practices: AVOID INHALATION OR INGESTION. PRACTICE GOOD HOUSEKEEPING AND PERSONAL HYGIENE PROCEDURES. A SHOWER IS RECOMMENDED IF SIGNIFICANT DUST EXPOSURE OCCURS.

Supplemental Safety and Health

SPECIAL ATTENTION IS DRAWN TO THE REQUIREMENTS OF THE

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HCC:N1 Boiling Pt:>1300.C, 2372.F Melt/Freeze Pt:M.P/F.P Text:METAL = 179 TO 312 C Spec Gravity:7.3 TO 11.3 Solubility in Water:INSOLUBLE Appearance and Odor:SOLID SILVER-WHITE METAL
========= Stability and Reactivity Data ==========
Stability Indicator/Materials to Avoid: YES STRONG OXIDIZERS MAY CAUSE VIOLENT REACTION Hazardous Decomposition Products:AT TEMPERATURES ABOVE THE MELTING POINT, TOXIC FUMES MAY BE EMITTED.
========== Ecological Information =============
Ecological:RQ FOR LEAD IS 1.0 LB.
======== Disposal Considerations ============
Waste Disposal Methods:DISPOSAL MUST COMPLY WITH FEDERAL, STATE & LOACI REGULATIONS. IF HAZARDOUS UNDER 40CFR261,SUBPARTS B & C, MATERIAL MUST BE TREATED OR DISPOS ED IN A FACILITY MEETING THE REQUIREMENTS OF 40CFR254 OR 265. IF NON-HAZARDOUS, MATERIAL SHOULD BE DISPOSED IN A FACILITY MEETING THE REQUIREMENTS OF 40CFR257.
========= MSDS Transport Information ===========
Transport Information:NOT REGUALTED.
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SARA Title III Information:THIS PRODUCT CONTAINS THE FOLLOWING CHEMICALS SUBJECT TO THE RELEASE REQUIREMENTS OF SECTION 302: CERCLA STATUTARY RQ

STANDARD (1910.1025) AND RESPIRATOR STANDARD (1910.134) SHOULD AIRBORNE EXPOSURES EXCEED THE OSHA ACTION LEVEL OR PEL.

OSHA LEAD

FOR LEAD= 1.0 LB. NOTE: NO REPRTING OF THE SOLID FORM IS REQUIRED IF THE DIAMETER OF THE PIECES OF THE SOLID METAL RELEASED IS 100 MICROMETER (0.004 INCHES) OR GREATER.

=========== Other Information ==============

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