

BOW SOLDER PRODUCTS CO. -- SOLDER, TIN ALLOY -- 3439-01-007-5491  
===== Product Identification =====

Product ID:SOLDER, TIN ALLOY  
MSDS Date:09/01/1986  
FSC:3439  
NIIN:01-007-5491  
MSDS Number: BTCMS  
=== Responsible Party ===  
Company Name:BOW SOLDER PRODUCTS CO.  
Address:900 HOBSON STREET  
Box:488  
City:UNION  
State:NJ  
ZIP:07083  
Country:US  
Info Phone Num:(201) 686-6040  
Emergency Phone Num:(201) 686-6040  
Pr  
eparer's Name:DGSC-SSH  
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  
Fraction by Wt: 63.5%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:2 MG/M3  
ACGIH TLV:2 MG/M3; 9394

Ingred Name:LEAD (SARA III)  
CAS:7439-92-1  
RTECS #:OF75250

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Fraction by Wt: 35.53%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:SEE 1910.1025  
ACGIH TLV:0.15 MG/M3,DUST;9394  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:ANTIMONY (SARA III)  
CAS:7440-36-0  
RTECS #:CC4025000  
Fraction by Wt: 0.5%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:0.5 MG/M3  
ACGIH TLV:0.5 MG (SB)/M3; 9394  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:BISMUTH  
CAS:7440-69-9  
RTECS #:EB2600000  
Fraction by Wt: 0.25%  
Other REC Limits:NONE SPECIFIED

Ingred Name:COPPER (SARA III)  
CAS:  
7440-50-8  
RTECS #:GL5325000  
Fraction by Wt: 0.08%  
Other REC Limits:1 MG(CU)/M3 (DUST)  
OSHA PEL:0.1MG/M3 FUME/1 DUST  
ACGIH TLV:0.2 MG/M3 FUME; 9394  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:ARSENIC (SARA III)  
CAS:7440-38-2  
RTECS #:CG0525000  
Fraction by Wt: 0.03%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:SEE 1910.1018  
ACGIH TLV:0.01 MG/M3, A1; 9394  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:IRON  
CAS:7439-89-6  
RTECS #:NO4565500  
Fraction by Wt: 0.02%  
Other REC Limits:NONE SPECIFIED

OSHA PEL:5 MG/M3  
ACGIH TLV:10 MG/M3 AS FE2O3

Ingred Name:ALUMINUM (SARA III)  
CAS:7429-90-5  
RTECS #:BD0330000  
Fraction by Wt: 0.005%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:15MG/M3 DUST/5 FUME  
ACGIH TLV:10MG/M3 DUST; 9394

Ingred Name:ZINC (SARA III)  
CAS:7440-66-6  
RTECS #:ZG8600000  
Fraction by Wt: 0.005%  
Other REC Limits:NONE SPECIFIED  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:ROSIN ACID  
CAS:8050-09-7  
Other REC Limits:NONE SPECIFIED

Ingred Name:CADMIUM (SARA III)  
CAS:7440-43-9  
RTECS #:EU9800000  
Fraction by Wt: 0.08%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.2 MG/M3 DUST; Z-2  
ACGIH TLV:0.01 MG/M3 DUST;9394  
EPA Rpt Qty:10 LBS  
DOT Rpt Qty:10 LBS

===== Hazards Identification =====

LD50 LC50 Mixture:NONE SPECIFIED  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:SKIN: BURNS. INGESTION: LEAD POISONING  
& METALLIC TASTE IN MOUTH. INHALATION:

ABDOMINAL PAIN, NAUSEA,  
JOINT OR MUSCLE PAIN, WEAKNESS, LOSS OF WEIGHT, MENTAL CONFUSION, &  
LEAD-LINE ON GUMS.

Explanation of Carcinogenicity:LEAD & ARSENIC ARE SUSPECTED HUMAN  
CARCINOGENS.

Effects of Overexposure:SKIN: BURNS. INGESTION: LEAD POISONING &  
METALLIC TASTE IN MOUTH. INHALATION: ABDOMINAL PAIN, NAUSEA, JOINT  
OR MUSCLE PAIN, WEAKNESS, LOSS OF WEIGHT, MENTAL CONFUSION, OR  
LEAD-LINE ON GUMS.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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===== First Aid Measures =====

First Aid:INHALATION: REMOVE TO FRESH AIR. SKIN: DON'T ATTEMPT TO  
REMOVE ROSIN FROM SECOND OR THIRD DEGREE BURNS. USE SOLVENTS TO  
REMOVE ROSIN FROM MINOR FIRST DEGREE BURNS. INGESTION: OBTAIN  
MEDICAL ATTENTION IN ALL CASES.

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

Flash Point:>300F,>149C

Lower Limits:NOT GIVEN

Upper Limits:NOT GIVEN

Extinguishing Media:NONFLAMMABLE. USE MEDIA SUITABLE F  
OR SURROUNDING  
FIRE.

Fire Fighting Procedures:WEAR SELF-CONTAINED RESPIRATORY SYSTEM.

Unusual Fire/Explosion Hazard:MODERATE HAZARD WHEN HIGH CONCENTRATION  
OF VERY FINE METALLIC DUST IS EXPOSED TO HEAT. MOLTEN METAL MAY  
REACT VIOLENTLY WITH WATER.

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

Spill Release Procedures:VACUUM OR WET SWEEP USING A RESPIRATOR &  
PROTECTIVE CLOTHING.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

===== Hand  
ling and Storage =====

Handling and Storage Precautions:STORE IN A CLOSED CONTAINER. AVOID  
INHALATION OF DUSTS OR FUMES. DON'T SMOKE OR EXPOSE FOOD TO DUST.  
KEEP AREA CLEAN.

Other Precautions:NONE SPECIFIED BY MANUFACTURER.

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

Respiratory Protection:IF VENTILATION DOES NOT MAINTAIN INHALATION  
EXOSURES BELOW PEL (TLV), USE NIOSH/MSHA APPROVED RESPIRATOR AS PER  
CURRENT 29 CFR 1910.134, INSTRUCTION

S/WARNINGS AND NIOSH RESPIRATOR  
SELECTION.

Ventilation:LOCAL EXHAUST: FUME HOOD OVER AREA. MECHANICAL: 200 FT/MIN.  
AIR VELOCITY INTO HOOD OPENING TO KEEP 1700F,>927

Melt/Freeze Pt:M.P/F.P Text:NOT GIVEN

Vapor Pres:0.000016

Vapor Density:NOT GIVEN

Spec Gravity:7.3-11.3

Evaporation Rate & Reference:NOT GIVEN

Solubility in Water:INSOLUBLE

Appearance and Odor:METALLIC COLOR, SOLID, GRAY TO SHINY SILVERY GRAY.

Percent Volatiles by Volume:NIL

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

ACIDS, BASES, OXIDIZERS, & WATER

Stability Condition to Avoid:EXTREME TEMPERATURES

Hazardous Decomposition Products:TOXIC FUMES

===== Disposal Considerations =====

Waste Disposal Methods:SCRAP DRIPPINGS & DROSSES SHOULD BE STORED IN A  
CLOSED CONTAINER & RETURNED TO A LEAD RECYCLER. FOLLOW FEDERAL,  
STATE, & LOCAL REGULATIONS REGARDING DISPOSAL.

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