Section I Ingredients

<u>Material</u>	CAS # Percent	OSHA PEL	ACGIH TLV
Lead	7439-92-1 >	85% 50 ug/m3	50 ug/m3
Antimony	7440-36-0 <	10% 500 ug/m3	500 ug/m3
Arsenic	7440-38-2 <	1% 10 ug/m3	10 ug/m3

Section II Physical Data

Appearance/Odor: Silver-gray metal;

no odor.

Specific Gravity: (Water = 1) 9.9 - 11.3

Solubility in Water: Insoluble

Evaporation Rate: Not Applicable

Melting Point: 486 - 690° F

Vapor Pressure: Not Applicable

Vapor Density: Not Applicable

Boiling Point: Not Applicable

% Volatiles by Volume: Not Applicable

Section III Health Hazard Information

ROUTES OF EXPOSURE

Inhalation: When dispersed in the air as a dust or fume, it may be inhaled & absorbed through

the lungs and upper respiratory tract. Acute & chronic overexposure can result.

<u>Ingestion</u>: Ingesting lead in significant amounts can result in both acute & chronic overexposure.

Skin: Skin irritation may result from exposure to dust or fumes. Dermatitis may result occassionally

from repeated skin contact with antimony, arsenic or tin compounds.

Eyes: Dust and fumes may cause irritation in some individuals.

ACUTE OVEREXPOSURE

Overexposure to lead can result in weakness, vomiting, loss of appetite, uncoordinated body movements, convulsions, stupor and possible coma & death.

CHRONIC OVEREXPOSURE

Overexposure to lead can cause insomnia, hypertension, slight irritation to skin & eyes, metallic taste, anemia, constipation, headache, muscle & joint pains, possible paralysis and encephalopathy. Lead exposure can pose risks to developing fetuses and may impair the reproductive systems in both men & women. Damage to the kidneys, central nervous system and blood forming system are also related to excessive lead absorption. OSHA's Lead Standard (29CFR1910.1025) should be consulted for additional information.

EMERGENCY/FIRST AID PROCEDURES

Eyes: Flush with copious amounts of water. Seek Medical attention.

Skin: Wash thoroughly with soap and water. If irritation occurs, seek medical attention.

Ingestion: Seek immediate medical attention.

Inhalation: Remove from exposure. Get medical attention if experiencing effects of overexposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Preexisting skin or respiratory tract disorders may be aggravated by exposure.

CARCINOGENICITY

Lead is listed by ACGIH (A3 - animal carcinogen), IARC (2B), Department of Health & Human Services' 11th Report on Carcinogens (reasonably anticipated to be a human carcinogen), and by the State of California.

Section V. Fire & Explosion Data

<u>Flash Point</u>: Not Applicable <u>Auto-Ignition Temperature</u>: Not Applicable <u>L.E.L/U.E.L.</u>: Not applicable. <u>Fire Extinguishing Media</u>: Use dry chemical or carbon dioxide. Do not use water on fires when molten metal is present.

<u>Special Fire Fighting Procedures</u>: Use approved full-facepiece, self-contained positive pressure breathing apparatus and full protective clothing. Use water spray to cool exposed containers, equipment & structure. NEVER USE WATER ON MOLTEN METALS SINCE EXPLOSIONS WILL RESULT.

<u>Unusual Fire & Explosion Hazards</u>: Molten metals produce fume or dust that may be toxic and/or a respiratory irritant. See Section IV for effects of acute/chronic overexposure.

Section VI. Reactivity Data

Stability: Stable

Conditions to Avoid: Not Applicable

Hazardous Polymerization: Not Applicable

Incompatability: Hologen gases, oxidizers or acids, or hydrogen peroxide may react violently. Under reducing conditions (strong acid or base and an active metal) or in the presence of nascent hydrogen, highly toxic stibine or arsine gas may be evolved.

Hazardous Decomposition Products: Under normal temperatures, this product will not decompose. Temperatures above the melting point may produce heavy metal fumes and/or dust.

Section VII. Personal Protective Precautions

Ventilation: Additional ventilation will be required if any area has exposures above the permissible exposure limits or threshold limit values listed in Section II. See the Lead Standard for additional information. Respiratory Protection: Use of approved respirators is required for applications where adequate ventilation cannot be provided to maintain levels below the permissible exposure limits. Review the lead & arsenic standards for further information on respiratory protection.

Eyes & Face: Safety glasses are recommended in any industrial environment. Face shields and goggles are recommended when working around molten metals.

Other Clothing/Equipment: Hard hat, safety boots, gloves and other safety equipment should be worn as appropriate for the work conditions. Normal work clothing should be adequate in most cases. If air monitoring were to identify a lead concern, OSHA's Lead Standard should be consulted.

Section VIII. Spill or Leak Procedures

Steps to be Taken If Released or Spilled: Dust or particulate should be vacuumed using HEPA filtration equipment or wet swept where vacuuming is not feasible. DO NOT use compressed air to clean up material. Avoid dry sweeping. Use approved respiratory gear if dust/fume overexposure possibility exists.

Waste Disposal Method: Recycling is the preferred method of disposal for this material. Follow all applicable local, state and federal regulations.

Section IX. Special Precautions/Procedures

Store in a dry area where accidental contact with acids, bases, hydrogen peroxide or halogen gases is not possible.

Follow all PPE procedures for handling and ventilation requirements when lead and arsenic exposures are above the permissible exposure limits or threshold limit values.

Wash hands, face and arms thoroughly before eating or smoking. Eating and smoking should be confined to noncontaminated areas. Work clothing and equipment should remain in designated contaminated areas and should not be taken home or laundered with personal clothes if exposure levels exceed the PEL's.

Review the Federal Standards for Occupational Exposure to Lead (29CFR1910.1025) and Arsenic (29CFR 1910.1018) for additional information concerning lead & arsenic in the industrial setting. If the permissible exposure limits for lead and arsenic are exceeded, the standards require shower facilities, locker rooms, physicals, air monitoring and biological monitoring of any exposed workers.

Section X. Reporting Requirements

Toxic Chemical Release Reporting, SARA Section 313:

Reportable chemicals in product: Lead (CAS #7439-92-1)
Antimony (CAS 7440-36-0) Arsenic (CAS 7440-38-2)

California Safe Drinking Water and Toxic Enforcement Act of 1986

This product contains lead, a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. Lead overexposure from this product may be prevented by following the recommendations listed in this material safety data sheet. Also consult the Lead Standard for additional information.

Arsenic is a known human carcinogen. Overexposure may be prevented by following the recommendations listed in this MSDS. Also consult the Arsenic Standard for additional information.

Department of Transportation: Not applicable.

Toxic Substances Control Act (TSCA)

The chemical ingredients in this product are in the Section 8(b) Chemical Substance Inventory (40 CFR 710) and are in compliance with TSCA.