BADA DIVISION HENNESSY INDUSTRIES, INC.

Approved by / date: _____

BADA COMPANY
MATERIAL SAFETY DATA SHEET

HARD LEAD
GENERAL INFORMATION

TRADE NAME (COMMON NAME OR SYNONYM)	DATE ISSUED	DATE REVISED
Hard Lead, Antimonial Alloy	02-16-87	02-10-03

MANUFACTURER'S CONTACT

Telephone: 270-781-1013

BADA
759 HENNESSY WAY
BOWLING GREEN, KY 42101-9177

INGREDIENTS

HAZARDOUS COMPONENTS	C.A.S.#	WEIGHT %	PERMISSABLE EXPOSURE LIMITS
Lead	7439-92-1	88 – 99%	0.05 mg/meter≥
Antimony	7440-36-0	0 – 12%	0.5 mg/meter≥
Arsenic*	7440-38-2	0 - 2%	0.01 mg/meter≥
Tin	7440-31-5	0 - 1%	0.1 mg/meter≥
Selenium	7782-49-2	0 - 1%	0.2 mg/meter≥
*Arsenic is classified as a carcinogen by OSHA 29CFR 1910.1018			

PHYSICAL DATA

APPEARANCE AND ODOR Silver-gray metal, odorless. Various shapes and sizes.	
BOILING POINT Greater than 2700°F	MELTING POINT 621°F
SPECIFIC GRAVITY (H_2O = 1) 9.7 – 11.3	VAPOR DENSITY Not applicable
SOLUBILITY IN WATER Negligible	VAPOR PRESSURE Not applicable
EVAPORATE RATE Not applicable	% VOLATILES BY VOLUME Not applicable

HEALTH HAZARD INFORMATION

ROUTES OF EXPOSURE

INHALATION	When scattered in the air as a dust, fume or mist, it may be inhaled (breathed) and absorbed through the lungs and upper respiratory tract. It can cause respiratory tract irritation and it can result in both acute and chronic overexposure.
INGESTION	When it gets into the mouth and is swallowed, it may be absorbed through the digestive system and can result in both acute and chronic exposure.
SKIN	Dust, fume, or mist are not readily absorbed through the skin; however, they may cause mechanical irritation to the skin.
EYES	Dust, fume, or mist may cause mechanical irritation.
ACUTE OVEREXPOSURE	If left untreated: weakness, vomiting, loss of appetite, uncoordinated body movements, convulsions, stupor, bloody stools, and possible coma.
CHRONIC OVEREXPOSURE	If left untreated: weakness, insomnia, hypertension, slight irritation to skin and eyes, metallic taste in mouth, anemia, constipation, headache, muscle and joint pains, neuromuscular dysfunction, possible paralysis and encephalopathy.

Lead and its inorganic compounds are neurotoxins which my produce peripheral neuropathy. For an overview of the effects of lead exposure, see OSHA 29CFR1910.1025, Appendix A.

FIRST AID

INHALATION:	Remove from exposure. Get medical attention if experiencing effects of overexposure.
INGESTION:	Get immediate medical attention.
EYES:	Flush with large quantities of water. Get immediate medial attention.
SKIN:	Wash thoroughly with soap and water.

FIRE AND EXPLOSION DATA

FLASH POINT	AUTO IGNITION TEMPERATURE	FLAMMABLE LIMITS IN AIR
Not applicable	Not applicable	Not applicable

FIRE EXTINGUISHING MEDIA

Dry chemical or carbon dioxide should be used on surrounding fire. Do NOT use water on fires where molten metal is present.

SPECIAL FIRE FIGHTING PRECAUTIONS

Use approved full-facepiece, self-contained breathing apparatus and full protective clothing if involved in a fire.

UNUSUAL FIRE AND EXPLOSION HAZARD

Molten metals produce fume, dust, or mist that may be toxic.

REACTIVITY DATA

STABILITY	CONDITIONS TO AVOID	HAZARDOUS POLYMERIZATION
Stable	Not applicable	Not applicable

INCOMPATIBILITY

Halogen 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 argine gas may be evolved.

HAZARDOUS DECOMPOSITION PRODUCTS

Temperatures above the melting point may produce lead oxide dust and/or fumes.

PERSONAL PROTECTION PRECAUTIONS

VENTILATION

Local exhaust ventilation must be provided in areas where exposures are above permissable limits or threshold values specified by OSHA or other local, state, and federal regulations.

RESPIRATORY PROTECTION

Use of approved (OSHA 29CFR1910.1025 (f)) respirators is required for applications where adequate ventilation cannot be provided.

EYES AND FACE

Face shields or vented goggles should be used around molten metal. Safety glasses should be used for operations generating flying pieces.

GLOVES

Gloves should be worn when handling the product.

OTHER CLOTHING AND EQUIPMENT

Full protective clothing is required if the permissable exposure limit is exceeded. Hard hat, safety shoes, and other safety equipment should be worn as appropriate for the environment.

SPECIAL PRECAUTIONS/PROCEDURES

SPILL OR LEAK

Dust or particulate should be vacuumed, or wet swept where vacuuming is feasible. Place dry material in dry, closed containers for disposal or recycling. Do not use compressed air or dry sweeping for cleaning. Use approved respiratory protection If dust/fume exposure possibility exists.

WASTE DISPOSAL METHOD

Material should be recycled if at all possible. Collection, transportation, and storage should be in accordance with federal, state and local laws.

STORAGE

Store in a dry area where accidental contact with hydrogen peroxide is not possible.

OTHER SPECIAL PRECAUTIONS/PROCEDURES

Wash hands, face, neck, and arms thoroughly before eating or smoking. Eating and smoking should be confined to non-contaminated areas. Work clothes and equipment should remain in designated contaminated areas, and should never be taken home or laundered with personal clothing. Do not use compressed air for blowing dust off clothes. Before using the product, consult the OSHA Federal Standard for Occupational Exposure to Lead 29CFR1910.1025.

ADDITIONAL INFORMATION

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Biological limit for lead: 50 micrograms lead/100 grams whole blood

OSHA Permissable Exposure Limits: Stibine – 0.10 ppm
Arsine – 0.05 ppm

This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.

CAUTION: CANCER HAZARD:
Contains Lead, a listed carcinogen. Lead is harmful if ingested. Wash thoroughly after using. Do not use this product while eating, drinking or using tobacco products. May cause chronic effects to gastrointestinal tract, CNS, kidneys, and blood. May cause birth defects.

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