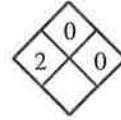




## MATERIAL SAFETY DATA SHEET

VENDEE AND THIRD PERSONS ASSUME THE RISK OF INJURY PROXIMATELY CAUSED BY THIS PRODUCT IF REASONABLE SAFETY PROCEDURES ARE NOT FOLLOWED AS PROVIDED FOR IN THE DATA SHEET, AND VENDOR SHALL NOT BE LIABLE FOR SUCH INJURY. FURTHERMORE, VENDOR SHALL NOT BE LIABLE FOR INJURY TO VENDEE OR THIRD PERSONS PROXIMATELY CAUSED BY ANY ABNORMAL USE OF THIS PRODUCT EVEN IF REASONABLE SAFETY PROCEDURES ARE FOLLOWED.  
 ALL PERSONS USING THIS PRODUCT, ALL PERSONS WORKING IN AN AREA WHERE THIS PRODUCT IS USED, AND ALL PERSONS HANDLING THIS PRODUCT SHOULD BE FAMILIAR WITH THE CONTENTS OF THIS DATA SHEET. POSTING THIS DOCUMENT FOR EMPLOYEE NOTIFICATION IS RECOMMENDED BY THE VENDOR.

N. F. P. A.



### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>TRADE NAMES</b>	Hard Lead; Sb, As	<b>TELEPHONE #</b>	(214)631-6070
<b>SYNONYMS</b>	Antimonial Arsenical Lead Alloy	<b>TELEPHONE #</b>	(317)247-1303
<b>MANUFACTURER'S NAME</b>	Quemetco, Inc.	<b>TRANSP. EMERGENCY #</b>	(800)424-9300
<b>ADDRESS</b>	7870 West Morris Street, Indianapolis, Indiana 46231-1365	<b>INTENDED USE</b>	Industrial
<b>PREPARED BY</b>	Environmental Services Department, RSR Corporation	<b>DATE</b>	Sep-02 Revised

### 2. COMPOSITION, INFORMATION ON INGREDIENTS

MATERIAL OR COMPONENT (CAS#)	WEIGHT %	OSHA		ACGIH		Other
		PEL/TWA	Ceiling	TLV/TWA	TLV/STEL	
Antimony (CAS# 7440-36-0)	0.5-13	0.5mg/m <sup>3</sup>	None	0.5mg/m <sup>3</sup>	None	Not Applicable
Arsenic (CAS# 7440-38-2)	0.05-3	10µg/m <sup>3</sup>	None	0.01mg/m <sup>3</sup>	None	5µg/m <sup>3</sup> Action Level
Lead (CAS# 7439-92-1)	80-100	50µg/m <sup>3</sup>	None	50µg/m <sup>3</sup>	None	30µg/m <sup>3</sup> Action Level
*Fume		**Respirable Dust	***Ceiling Limit			

### 3. HAZARDS IDENTIFICATION

**Routes of Exposure for Users**

- Skin Contact     Dust, vapor or fume may cause irritation.
- Skin Absorption     Not readily absorbed through the skin.
- Eye Contact     Dust, vapor or fume may cause irritation.
- Ingestion     Dust, vapor or fume may be absorbed by the digestive system and can result in both acute and chronic overexposure.
- Inhalation     Dust, vapor or fume may be absorbed by the respiratory system and can result in both acute and chronic overexposure as well as respiratory irritation.

<b>Effects of Overexposure</b>			
<b>Acute</b>	If left untreated: weakness, vomiting, loss of appetite, uncoordinated body movements, convulsions, stupor, bloody stools and possibly coma.		
<b>Chronic</b>	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 exposure can pose risk to developing fetuses and may also impair the reproductive systems in both men and women. Damage to the kidneys, liver, hematopoietic and/or central nervous system may occur.		
<b>Signs and Symptoms of Exposure</b>	Irritation and effects of overexposure as described above.		
<b>Aggravated Medical Conditions</b>	Chronic forms of kidney, liver, hematopoietic or neurologic diseases; preexisting skin or respiratory disorders may be aggravated by exposure to this product.		
<b>Notes to Physician</b>	Lead and its inorganic compounds are neurotoxins which may produce peripheral neuropathy. For an overview of the effects of lead exposure, consult Appendix A of OSHA's Occupational Exposure to Lead (29 C.F.R. §1910.1025). Inhalation or ingestion of arsenic may produce pulmonary or skin carcinogens. For an overview of the effects of arsenic exposure, consult Appendix A, B and C of OSHA's Occupational Exposure to Arsenic (29 C.F.R. §1910.1018). Arsenic and antimony are primary chemical skin irritants; antimony is a severe pulmonary irritant. The chronic effects of antimony ingestion may resemble that of arsenic poisoning. For combustion product effects see Hazardous Combustion Products in Section 5. Fire Fighting Measures.		
<b>4. FIRST AID MEASURES</b>			
Eyes	Flush with copious amounts of water. Get immediate medical attention.		
Skin	Wash thoroughly with soap and water. If irritation occurs, get medical attention.		
Ingestion	Get immediate medical attention.		
Inhalation	Remove from exposure. Get medical attention if experiencing effects of overexposure.		
<b>5. FIRE FIGHTING MEASURES</b>			
<b>Flash Point</b>	Not Applicable	<b>Test Method:</b>	Not Applicable
<b>Flammable Limits in Air (% by volume, estimated)</b>	Lower: Not Applicable	Upper:	Not Applicable
<b>Auto-ignition Temperature</b>	Not Applicable		
<b>Hazardous Combustion Products</b>	High temperatures may produce heavy metal fume, vapor, and/or dust. Combustion products may cause effects of overexposure as noted in Section 3. Hazards Identification. Other unidentified health effects may occur.		
<b>Conditions Contributing to Flammability</b>	Not Applicable		
<b>Extinguishing Media</b>	Dry chemical or carbon dioxide should be used on surrounding fire. Do not use water on fires where molten metal is present.		
<b>Special Fire Fighting Procedures</b>	Use full-body protection and full-face, self-contained breathing apparatus operated in a positive-pressure mode.		
<b>Unusual Fire and Explosion Hazards</b>	Molten metals produce fume, vapor or dust that may be toxic or respiratory irritants. The product, or its dust, can react vigorously with strong oxidizing agents.		
<b>Sensitivity to Impact</b>	Not Applicable	<b>Sensitivity to Static Discharge</b>	Not Applicable

## 6. ACCIDENTAL RELEASE MEASURES

**Steps to be Taken if Material is Released or Spilled** Dust material should be vacuumed, or wet swept where vacuuming is not feasible. Particulate matter should be stored in dry containers for later disposal or reclamation. Do not use compressed air or dry sweeping as a means of cleaning. Assure conformity with applicable governmental regulations.

**Neutralizing Chemicals** Not Applicable

## 7. HANDLING AND STORAGE

The two major means of metal absorption are inhalation and ingestion. Most inhalation problems can be prevented with adequate use of Section 8 ventilation and respirator information. Always exercise normal, good personal hygiene prior to smoking, eating or drinking. Smoking, eating and drinking should be confined to uncontaminated areas. Avoid skin contact. Wash hands, face, neck and arms thoroughly with soap and water before eating, drinking or smoking. Work clothes and equipment should remain in designated lead contaminated areas; never taken home or laundered with personal clothing. Launder contaminated clothing before reuse.

This product is intended for industrial use only. Isolate from children and their environment.

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

Adhere to all personal protection equipment procedures when handling, and ventilation requirements when heavy metal exposures are above permissible exposure limits or threshold limit values.

## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

**Ventilation Requirements** Ventilation, as described in Industrial Ventilation, A Manual of Recommended Practice, produced by the American Conference of Governmental Industrial Hygienists, shall be provided in areas where exposures are above the permissible exposure limits or threshold limit values specified by OSHA or other local, state and federal regulations.

### Specific Personal Protection Equipment

**RESPIRATORY** As specified by 29 C.F.R. §1910.1025 Subpart (f) and 29 C.F.R. §1910.1018 Subpart (h) of the Federal Occupational Safety and Health Administration Standard for Occupational Exposure to Lead and Inorganic Arsenic, respectively. Other local and state regulations may also apply.

**EYE** Face shield or vented goggles should be worn around molten metal.

**GLOVE** Gloves should be worn when handling this product.

**OTHER CLOTHING AND EQUIPMENT** Coveralls or other full body clothing shall be worn during product use and properly laundered after use, with the wash water disposed of in accordance with local, state and federal regulations. Hard hat, safety boots and other safety equipment should be worn as appropriate for the industrial environment. Personal clothing and shoes should be protected from contamination with this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>BOILING POINT</b> @ 760 mm Hg	Greater than 3164°F (1740°C)	<b>MELTING POINT</b>	486-621°F (252-327°C)
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<b>SPECIFIC GRAVITY</b> (H <sub>2</sub> O = 1)	9.6-11.3	<b>VAPOR PRESSURE</b> (Reference Temperature)	Not Applicable
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<b>VAPOR DENSITY</b> (Air = 1)	Not Applicable	<b>SOLUBILITY IN H<sub>2</sub>O</b> (% by wt.)	Insoluble
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<b>% VOLATILE</b> <b>BY VOLUME</b>	Not Applicable	<b>EVAPORATION RATE</b> (Butyl Acetate = 1)	Not Applicable
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<b>COEFF. WATER/OIL</b> <b>DISTRIBUTION</b>	Not Applicable	<b>pH</b>	Not Applicable
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<b>FREEZING POINT</b>	See melting point	<b>ODOR THRESHOLD</b>	Not Applicable
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**APPEARANCE AND ODOR** Bluish-gray metal; no apparent odor.

## 10. STABILITY AND REACTIVITY

Conditions Contributing to Instability Not Applicable      Reactivity Not Applicable

Incompatibility ~~Strong oxidizers combined with this product may liberate hydrogen gas.~~

Hazardous Decomposition Products Under normal temperatures this product will not decompose.

Conditions Contributing to Hazardous Polymerization Not Applicable

## 11. TOXICOLOGICAL INFORMATION

Toxicity, Mutagenic, Teratogenic, Synergistic and Sensitization Information      LC<sub>50</sub> and LD<sub>50(oral)</sub> information is not available.

### Carcinogenicity

Listed by:     IARC 2B     NTP             OSHA             California    Component:    LEAD  
Listed by:     IARC 1     NTP             OSHA             California    Component:    ARSENIC

## 12. ECOLOGICAL INFORMATION

Not Available

## 13. DISPOSAL CONSIDERATIONS

### Waste Disposal Method

Dispose or recycle toxic substances and hazardous wastes in accordance with local, state, and federal regulations.

## 14. TRANSPORT INFORMATION

U.S. Department of Transportation      No special requirements for solid metal. Quantities of lead less than 100µm in diameter and greater than or equal to 10 pounds in one container are considered by DOT as an Environmentally Hazardous Substance, Solid, n.o.s., Class 9, UN3077, Packing Group III.

Canadian Transportation of Dangerous Goods      This product is not considered a Hazardous Material for shipping under Canadian Transportation of Dangerous Goods.

## 15. REGULATORY INFORMATION

### Toxic Chemical Release Reporting, EPA Regulation 40 C.F.R. §372 (SARA Section 313)

Reportable chemicals in product: 80-100% lead (CAS #7439-92-1), 0.5-13% antimony (CAS #7440-36-0), 0.05-3% arsenic (CAS #7440-38-2)

### California Safe Drinking Water and Toxic Enforcement Act of 1986 ("Proposition 65")

WARNING: This product contains lead, a chemical known to the State of California to cause birth defects or other reproductive harm. This product contains lead and arsenic, chemicals known to the State of California to cause cancer. Overexposure from this product may be prevented by following the recommendations throughout this MSDS.

### Toxic Substances Control Act (TSCA), EPA Regulation 40 C.F.R. §710

The chemical ingredients in this product are in the Section 8(b) Chemical Substance Inventory (40 C.F.R. §710) and/or are otherwise in compliance with TSCA.

### Canadian Workplace Hazardous Materials Information System

This product is considered controlled in Canada and has been placed in WHMIS Subdivision B of Division 2 of Class D due to lead content. This MSDS has been prepared to meet WHMIS and OSHA requirements using the ANSI 16 heading MSDS format.

## 16. OTHER INFORMATION

Before Using This Product Be Familiar With The Information Contained In: The Federal Standard for Occupational Exposure to Lead (29 C.F.R. §1910.1025), published in the Federal Register on Tuesday, November 14, 1978, by the Occupational Safety and Health Administration and the Federal Standard for Occupational Exposure to Arsenic (29 C.F.R. §1910.1018), published in the Federal Register on Friday, May 5, 1978, by the Occupational Safety and Health Administration.