



ALCHEMY CASTINGS INC.

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Material Safety Data Sheet

WHMIS (Pictogram)	WHMIS (Classification)	Protective Equipment
	D-2A: Material causing Other toxic effects (Very Toxic).	

SECTION I: Product and Company Identification

Common Name:	Antimonial Lead, Machine Lead	In Case Of Emergency Canutec (CAN): (613) 996-6666 Infotrac (USA): (800) 535-5053 International: (352) 323-3500 Date Prepared: February 2006
Trade Name:	Hard Lead	
Chemical Family:	Non Ferrous Metals	
Material Use:	Industrial Applications	
Supplier Name:	Alchemy Castings 563 Kenilworth Ave. N. Hamilton, Ontario Canada L8H 4T8	

SECTION II: Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limit	LD50 oral, rat
Lead (Pb)	7439-92-1	93 - 97	0.05 mg/m ³	790 mg/kg
Antimony (Sb)	7440-36-0	3.00 – 7.00	0.50 mg/m ³	15 mg/kg (man)
Arsenic (As)	7440-38-2	0.10 – 1.00	0.01 mg/m ³	763 mg/kg
Tin (Sn)	7440-31-5	0.00 – 0.50	2.00 mg/m ³	72 mg/kg (mouse)

SECTION III: Physical Information

Boiling Point (°C)	Pb1740, Sb 1320	Specific Gravity	10.3 – 11.3
Vapour Pressure (mm Hg)	1mm @975 °C	% Volatile (By Volume)	Not Pertinent
Vapour Density (Air=1)	Not Pertinent	Evaporation Rate (Ether=1)	Not Pertinent
Solubility In Water	Nil	pH	Not Pertinent
Appearance	Metallic Grey	Melting Point (°C)	252 - 327
Odour	None	Form	Bar, Ingot

SECTION IV: Transport Information

Shipping Name	Not Regulated	Class/Division	Not Pertinent
UN Number	Not Pertinent	Packing Group	Not Pertinent

SECTION V: Fire and Explosion Hazards	
Flash Point (°C) and Method	Not Pertinent
Flammable Limits in Air (Vol %)	Upper: Not Pertinent Lower: Not Pertinent
Means of Extinction	Class D – Dry Chemical or Sand

SECTION VI: Health Hazard and First Aid Data

Ingestion	Effects:	May cause headache, nausea, abdominal pains, fatigue, muscle/joint pain, kidney disjunction, wrist-drop.			
	First Aid:	Give water or milk. If conscious, induce vomiting. Seek medical assistance for possible blood poisoning.			
Eye Contact	Effects:	Molten metal may splash.			
	First Aid:	Flush with large amounts of water.			
Skin Contact	Effects:	May cause local irritation.			
	First Aid:	Wash skin with soap and water. Remove clothing and launder.			
Skin Absorption	Not Pertinent				
Inhalation	See "Ingestion", CNS damage (results in fatigue, tremours, hallucinations, convulsions, delirium), weight loss, sleep disturbance.				
Effects of Acute Exposure	See "Ingestion Effect" and "Inhalation Effects".				
Effects of Chronic Exposure	Possible anemia, central nervous systems and kidney damage.				
Carcinogenicity	IARC (Yes)				
Mutagenicity	No	Teratogenicity	Yes	Reproductive Effects	Yes

SECTION VII: Reactivity Data

Stability	Stable - Yes	Conditions to Avoid	Not Pertinent			
Incompatible Materials	Water	No	Acid	No	Oxidizers	Yes
	Corrosive	No	Alkali	No	Reducers	No
	Other	No				
Hazardous Decomposition Products	Toxic lead fumes will form at high temperatures. Contact with sodium azide generates lead azide – a detonating compound.					
Hazardous Polymerization	May Occur	No	Will Not Occur	X		
	Conditions to Avoid	Not Pertinent				

SECTION VIII: Preventative Measures	
Steps to be taken in case Material is Released or Spilled: If spill of dust, use cleanup methods which avoid dust generation. Use water and wet sweep or vacuum.	
Waste Disposal Method: Dispose of in accordance with appropriate federal and local regulations.	
Respiratory Protection: When engineering controls are not feasible to control overexposure, use appropriate NIOSH approved respirators.	
Engineering Controls	Local Exhaust Essential to keep worker exposure within allowable limits during welding or grinding.
	Mechanical (General) Not Applicable
	Special Not Applicable Other Not Applicable
	Not Applicable
Protective Gloves: As needed to protect against physical hazards.	Eye Protection: Safety glasses, goggles or face shield if molten.
Other Protective Equipment: Heat resistant leggings and gloves if pouring molten metal.	

SECTION IX: Special Precautions
Precautions to be taken in Handling and Storing: The scrap metal itself presents no health hazard unless it is welded, burned, ground or cut. Possible fumes may be generated. Should have complete evaluation done. Wash hands and arms after handling.
Special Precautions and Waste Disposal Methods: Return to manufacturer, scrap dealer, or dispose of in accordance to local & federal regulations.

SECTION X: Notice to Reader
The information contained in this MSDS was obtained from sources which are believed to be reliable. It is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. The manufacturer does not assume responsibility and expressly disclaims liability for any loss, damage, or expense arising out of or in any way connected with, the handling, storage, use or disposal of the product identified in this MSDS.

Prepared by: Health, Safety and Environment Department of Alchemy Castings