

## MATERIAL SAFETY DATA SHEET

### SECTION I - PRODUCT IDENTIFICATION

Trade Names and Synonyms	Cerrobase
Chemical Names and Synonyms	
Chemical Family	Bismuth Based Alloy

### SECTION II - INGREDIENTS

Ingredient	C.A.S. Number	% W/W		Exposure Limit	LD50 oral, rat
		Min	Max		
Bismuth	7440-69-9		55.50	no data	500 mg/kg
Lead	7439-92-1		44.50	0.05 mg/m3	790 mg/kg

### SECTION III - PHYSICAL DATA

Boiling Point ( deg C )	NP	Spec Gravity	U
Vapour Pressure ( mm Hg )	NP	% Volatile (by volume )	NP
Vapour Density ( Air=1 )	NP	Evaporation Rate ( Ether = 1 )	NP
Solubility in Water	Nil		
Appearance	Metallic Silver	pH	NP
Odour	None	Melting Point ( deg C )	124
Form	Solid		

WHMIS Classification	D2-A	TDG Information
NP - Not Pertinent:		Shipping Name: Not Regulated
U - Unknown:		UN Number: NP
		Class / Division: NP
		Packing Group: NP

### SECTION IV - FIRE AND EXPLOSION HAZARDS

Flash Point ( deg C ) and Method	Flammable Limits in Air ( Vol % )	
<b>DUST MAY GENERATE A FIRE</b>	Upper:	NP
	Lower:	NP
Means of Extinction:	Class D - Dry Chemical, or Dry Sand	

**SECTION V - HEALTH HAZARD AND FIRST AID DATA**

Ingestion	EFFECTS: Metallic taste, abdominal pain, cramps, headaches, loss of appetite, muscle soreness, increasing constipation.
	FIRST AID: Give water or milk. If conscious, induce vomiting. Report suspect cases to a physician for blood testing.
Eye Contact	EFFECTS: Molten metal may splash into eye.
	FIRST AID: Flush with large amounts of water for 15 minutes and seek medical aid.
Skin Contact	EFFECTS: Not a recognized hazard.
	FIRST AID: If dust or mist gets on skin, wash skin with soap and water. Remove clothing and launder.
Skin Absorption	NP
Inhalation	Fume or dust may cause local irritation to the respiratory tract.
Effects of Acute Exposure	Lead encephalopathy, could occur after a very heavy rapid exposure.
Effects of Chronic Exposure	May cause damage to the blood, kidney and central nervous systems.
Carcinogenicity:	IARC ( Yes )
Mutagenicity:	Yes
Teratogenicity:	Yes
Reproductive Effects:	Yes

**SECTION V I - REACTIVITY DATA**

Stability:	Stable - Yes	Conditions to Avoid:	NP
Incompatible Materials	Water:	No	Acid: No
	Corrosive:	No	Alkali: No
	Other:	No	Oxidizers: Yes
			Reducers: No
Hazardous Decomposition Products:	Toxic metal oxide fumes will form at high temperatures.		
Hazardous Polymerization:	May Occur -	NO	Conditions to Avoid: NP
	May not Occur -	X	


## SECTION V I I - PREVENTIVE MEASURES

Steps to be Taken in Case Material is Released or Spilled:		If spill of dust use clean-up methods which avoid dust generation. Use water and wetsweep 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 over exposure, use appropriate NIOSH approved respirators.	
Engineering Controls	Local Exhaust:	Essential to keep worker exposure with-in allowable limits during welding or grinding.	Special:
	Mechanical ( General ):		Other:
Protective Gloves:	As needed to protect against physical hazards.	Eye Protection:	Safety glasses, goggles, face shield if molten.
Other Protective Equipment:		Heat resistant leggings and gloves if pouring molten metal.	

## SECTION V I I I - 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, arms, and hair after handling.
Special Precautions and Waste Disposal Methods:	Return to manufacturer, scrap dealer, or dispose of according to local regulations.

## SECTION IX - PREPARATION INFORMATION

Prepared By: Health, Safety and Environmental Department	
	
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