

MATERIAL SAFETY DATA SHEET

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B2478, B2481
MSDS No. 80760-02
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SECTION I NAME		24 HOUR EMERGENCY ASSISTANCE	
Product	Bismuth Metal	CHEMTREC 800-424-9300 Day (312) 468-3700	HEALTH 1 FLAMMABILITY 1 REACTIVITY 0
Chemical Synonyms			
Formula	Bi _(m)	HAZARD RATING	LEAST SLIGHT MODERATE HIGH EXTREME 0 1 2 3 4
RTECS #	EB2600000		
C.A.S. No.	7440-69-9		

SECTION II HAZARDOUS INGREDIENTS OF MIXTURES		
Principal Hazardous Component(s)	%	TLV Units
NA = Not Applicable		
NE = None Established		

SECTION III PHYSICAL DATA			
Melting Point (°F)	271°C	Specific Gravity (H ₂ O = 1)	9.75
Boiling Point (°F)	1560°C	Percent Volatile by Volume (%)	NA
Vapor Pressure (mm Hg)	NA	Evaporation Rate (= 1)	NA
Vapor Density (Air = 1)	NA		
Solubility in Water	Insoluble		
Appearance and Odor	Grey/white metallic particles, no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA			
Flash Point (Method Used)	NA	Flammable Limits in Air % by Volume	Lower Upper
Extinguisher Media	Use any medium suitable for extinguishing supporting fire.		

SPECIAL FIREFIGHTING PROCEDURES
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

UNUSUAL FIRE AND EXPLOSION HAZARDS
Readily flammable in powdered form. Not considered to be an explosion hazard.

D.O.T.
Not Regulated

Approved by U.S. Department of Labor "essentially similar" to form OSHA-174

SECTION V HEALTH HAZARD DATA

Threshold Limited Value	NE
Effects of Overexposure	Acute: Mild irritation possible to skin, eyes, lungs, mucous membranes, and GI tract. Rashes, nausea, headaches. Chronic: low systemic poisoning hazard, salivation, kidney damage.

Emergency and First Aid Procedures
Skin: Wash exposed area with soap and water. Get medical advice if irritation develops. Eyes: Wash eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately. Do not rub. Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician. Ingestion: If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. Call a physician. Immediately.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	None
	Stable	X	
Incompatibility (Materials to avoid)	Aluminum, Acids, Ammonium Nitrate, Mixed Halogens		
Hazardous Decomposition Products	None known		
Hazardous Polymerization	Conditions to Avoid	None	
May Occur	Will Not Occur	X	

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled
Remove all sources of ignition. Ventilate area of leak or spill. Clean-up personnel may require protection from inhalation of dust. Spills: Clean up in a manner that does not disperse dust into the air. Use non-sparking tools. Pick up for recovery or disposal and place in a closed container. Wash spill area thoroughly.

Waste Disposal Method
Recycle. Disposal: Whatever cannot be saved for reclamation may be disposed in a RCRA approved hazardous waste facility. Do not flush to the sewer.

Discharge, treatment, or disposal may be subject to federal, state, or local laws.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	Dust		
Ventilation	Local Exhaust	Special	
	Mechanical (General)	Other	
Protective Gloves	Vinyl or Rubber	Eye Protection	Safety glasses
Other Protective Equipment	Lab coat		

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing
Store in a cool dry location.
Keep container tightly closed when not in use.

Other Precautions
Read label on container before using.
Conditions Aggravated/Target Organs: None known.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Rev. No.	2	Date	4/11/88	Approved	K. Kuchel	Chemical Safety Coordinator	RMC
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