



MATERIAL SAFETY DATA SHEET  
COMPLIES WITH 29 CFR 1910.1200.  
OSHA HAZARD COMMUNICATION RULE

DATE OF LAST REVISION: 05-22-96

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## CHEMICAL IDENTITY

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LABEL IDENTITY	<b>BISMUTH</b>
FORMULA	<b>Bi</b>
CHEMICAL FAMILY	<b>ELEMENT</b>
HAZARDOUS INGREDIENTS	<b>NONE LISTED</b>

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## PHYSICAL AND CHEMICAL PROPERTIES

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COLOR, FORM AND ODOR	<b>Silvery white or reddish metal, soft and brittle, Odorless</b>
BOILING POINT	<b>1420-1560</b>
VAPOR DENSITY	<b>NA</b>
VAPOR PRESSURE	<b>1mm @ 1021°C</b>
% VOLATILE BY VOLUME (%)	<b>NA</b>
SPECIFIC GRAVITY	<b>9.80</b>
EVAPORATION RATE (H <sub>2</sub> O=1)	<b>NA</b>
SOLUBILITY IN WATER	<b>Insoluble</b>
MELTING POINT	<b>271.3</b>

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## FIRE AND EXPLOSION HAZARD DATA

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FLASH POINT	<b>NA</b>
FLAMMABLE LIMITS	<b>Non-flammable</b>
EXTINGUISHING MEDIA	<b>Dry sand or powder for metal powders.</b>
SPECIAL FIRE FIGHTING PROCEDURES	<b>Wear a self-contained breathing apparatus</b>
UNUSUAL FIRE & EXPLOSION HAZARDS	<b>Bismuth powder has a moderate fire hazard when exposed to flame and by chemical reaction with oxidizing agents.</b>





## BISMUTH MATERIAL SAFETY DATA SHEET

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### SAFE HANDLING AND USE

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: **Wear respiratory protection if dusty. Sweep up and transfer to a sealed container.**

WASTE DISPOSAL METHOD: **Dispose of in accordance with local, state and federal regulations.**

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### SPECIAL PROTECTIVE INFORMATION

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RESPIRATORY PROTECTION	<b>Wear high efficiency respirator for any dust or fume producing operations.</b>
LOCAL EXHAUST	<b>Fume hood if dust or fumes are produced</b>
MECHANICAL (general)	<b>NA</b>
SPECIAL	<b>NA</b>
OTHER	<b>NA</b>
PROTECTIVE GLOVES	<b>Rubber Gloves</b>
EYE PROTECTION	<b>Safety goggles</b>
OTHER PROTECTIVE EQUIPMENT	<b>As needed to prevent contact</b>

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### SPECIAL PRECAUTIONS

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PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:  
**Store in cool, dry area avoiding contact with fumes or hot surfaces.**

TRANSPORTATION REQUIREMENTS	DOT CLASS:	<b>Not Classified</b>
	UN NUMBER:	<b>NC</b>
	IMCO CLASS:	<b>NC</b>
	OTHER:	<b>---</b>

PRECAUTIONARY LABELING **NONE**

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**NA = NOT APPLICABLE**

**ND = NO DATA**

**NC = NOT CLASSIFIED**