



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

1533 W. Henrietta Rd.
Avon, New York 14414
(716) 226-6177

MSDS No. BB 130
Effective Date October 28, 1998

SECTION V HEALTH HAZARD DATA

BB 130

Threshold Limited Value

None established.

Effects of Overexposure

Bismuth metal is of relatively low toxicity and has little or no effect on intact skin or mucous membranes. The metal itself is not particularly hazardous on ingestion. **EYES AND SKIN:** Prolonged or repeated contact may cause irritation.

Emergency and First Aid Procedures

SKIN: Wash with soap and water.
EYES: Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention. **INHALATION AS FUME:** Remove to fresh air. Get medical attention for observation and support. **INGESTION:** If swallowed, if conscious, give large amounts of water or milk to drink. Treat symptomatically and supportively. Get medical attention. Never give anything by mouth to an unconscious person.

SECTION VI REACTIVITY DATA

Stability	Unstable		Conditions to Avoid	Excessive temperature, sources of ignition.
	Stable	X		

Incompatibility (Materials to Avoid)	It reacts with oxidizing agents and acids. Ammonium nitrate plus powdered Bismuth may cause violent reaction.
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Hazardous Decomposition Products	It can emit toxic fumes on reaction with acids or acid fumes. When heated, it burns in air to form Bismuth Trioxide.
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Hazardous Polymerization	Conditions to Avoid	Not applicable.
May Occur		
		X

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Sweep up and place in a suitable container for proper disposal.
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Waste Disposal Method

Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

Dispose of in an approved chemical landfill or contract with a licensed chemical waste disposal service.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None should be needed in normal laboratory handling. If dusty or fume conditions prevail, work in ventilation hood or wear a NIOSH/MSHA-approved dust mask or respirator for fumes.		
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Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.

Protective Gloves	Gloves recommended.	Eye Protection	Chemical safety glasses.
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Other Protective Equipment	Goggles, lab coat, proper gloves, ventilation hood, and eye wash station.
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SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool, dry, well-ventilated area, away from acids, oxidizing agents, and sources of heat or ignition. May ignite in the presence of moisture. Wash thoroughly after handling.
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Other Precautions	Read label on container before using. Do not wear contact lenses when working with chemicals.
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Avoid dispersion of dust in air.
Remove and wash contaminated clothing.

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

Revision No. 5	Date 10/28/98	Approved Michael Raszeja	Chemical Safety Coordinator MR
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The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards. Printed on recycled paper.

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	BISMUTH METAL	 CHEMTREC 800-424-9300 Day 716-226-6177 NFPA HAZARD RATING LEAST SLIGHT MODERATE HIGH EXTREME 0 1 2 3 4	Health	0
Chemical Synonyms	Bismuth Metal, Lumps, Powder.		Fire	0
Formula	Bi		Reactivity	1
Unit Size	up to 2.5 Kg.		HMIS *	
C.A.S. No.	7440-69-9			

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Bismuth Metal, Lumps, Powder	>99%	None established.

LOW HEALTH HAZARD FOR USUAL LABORATORY HANDLING.

SECTION III PHYSICAL DATA

Melting Point (°F)	271.3°C (519°F)	Specific Gravity (H ₂ O = 1)	9.80 (20/4 C).
Boiling Point (°F)	1560°C (2642°F)	Percent Volatile by Volume (%)	Non-volatile.
Vapor Pressure (mm Hg)	@ 1021°C = 1	Evaporation Rate (=1)	Not applicable.
Vapor Density (Air=1)	Unknown.		
Solubility in Water	Insoluble.		
Appearance & Odor	Lumps or powder, silver-white or reddish metal; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable (NA).	Flammable Limits in Air % by Volume	NA	Lower	Upper
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Extinguisher Media	Use any media suitable for extinguishing supporting fire.
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SPECIAL FIREFIGHTING PROCEDURES

Toxic combustion products may require self-contained breathing apparatus, especially when the chloride salts may be formed.

UNUSUAL FIRE AND EXPLOSION HAZARDS

In dust or powder form may be a fire hazard when exposed to flame and by chemical reaction with oxidizing agents.

D.O.T.	NON-REGULATED.
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Approved by U.S. Department of Labor "essentially similar" to form OSHA-20