



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

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

MSDS No. BB 62
Effective Date January 27, 1999

SECTION V HEALTH HAZARD DATA

BB 62

Threshold Limited Value

TLV-as Ba TWA: 0.5 mg/m³. (Air) (ACGIH 1992-93). RTECS No. CQ980000
Toxicity Data: LD50 - 50 mg/kg subcutaneous - mouse.

Effects of Overexposure

INGESTION: Oral intake may cause weakness, salivation, nausea, vomiting, diarrhea, abdominal pain, muscular paralysis. **INHALATION:** Similar to those of oral intake. Severe irritation of respiratory tract may occur. **EYES AND SKIN:** May cause severe irritation or burns.

Emergency and First Aid Procedures

INGESTION: If swallowed, if conscious, give milk or water to drink. Induce vomiting, repeat until vomit fluid is clear. Call physician. Never give anything by mouth to an unconscious person. **INHALATION:** Remove to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Flush thoroughly with water, then wash with mild soap and water.

SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	Air-reacts to form Barium Carbonate. Water-reacts to form Barium Hydroxide and heat. Extreme temperature and heat. Moisture sensitive.
	Stable		
	X		

Incompatibility (Materials to Avoid)	Strong base-reacts rapidly with mineral acids generating heat, reacts with water to give Barium Hydroxide. Reacts with Hydrogen sulfide, Hydroxylamine, Nitrogen dioxide at 200°C, Mercurous oxide, Nickel oxide, Sulfur trioxide.
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Hazardous Decomposition Products	Thermal decomposition may release toxic and/or hazardous fume of barium metal.
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Hazardous Polymerization		Conditions to Avoid
May Occur	Will Not Occur	Generates heat and toxic solutions when dissolved in water.
	X	

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Recover for use if not contaminated. Do not touch spilled material. Wearing proper protective clothing, take up with sand or other absorbent material and place into dry container for proper disposal. Residue can be flushed to sewer with water.
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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 waste disposal agency.
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SECTION VIII SPECIAL PROTECTION INFORMATION

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

Protective Gloves	Rubber.	Eye Protection	Chemical safety goggles.
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Other Protective Equipment	Lab coat, apron, eye wash station, proper gloves, ventilation hood, safety shower.
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SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool, dry place away from acids. 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 breathing dusts. Avoid contact with skin, eyes and mucous membranes. 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	1/27/99	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	BARIUM OXIDE
Chemical Synonyms	Barium Monoxide/Protoxide (Anhydrous)
Formula	BaO
Unit Size	up to 2.5 Kg.
C.A.S. No.	1304-28-5

CHEMTREC
800-424-9300
Day 716-226-6177

NFPA HAZARD RATING
LEAST SLIGHT MODERATE HIGH EXTREME
0 1 2 3 4

Health	3
Fire	0
Reactivity	1

HMIS *
3 4

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Barium Oxide	100%	TWA 0.5 mg/m ³ (Air) as Ba

DANGER! POISON HARMFUL IF		
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INHALED OR SWALLOWED. HARMFUL DUST.		
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IRRITANT TO SKIN, EYES AND MUCOUS MEMBRANES.		
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SECTION III PHYSICAL DATA

Melting Point (°F)	1923°C (3493°F)	Specific Gravity (H ₂ O = 1)	5.72
Boiling Point (°F)	2000°C (3632°F)	Percent Volatile by Volume (%)	N/A
Vapor Pressure (mm Hg)	Negligible.	Evaporation Rate (≈1)	N/A
Vapor Density (Air=1)	N/A		
Solubility in Water	Moderate.		
Appearance & Odor	White to yellowish-white solid; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable.	Flammable Limits in Air % by Volume	N/A	Lower	Upper
Extinguisher Media	Dry chemical extinguisher. If water is used, use large quantities.				

SPECIAL FIREFIGHTING PROCEDURES

If involved in fire situation, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing. Protect against barium containing dust, mists or fumes.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 157)

UNUSUAL FIRE AND EXPLOSION HAZARDS

Negligible fire hazard when exposed to heat or flame. Fire or excessive heat may produce hazardous decomposition products as dust or fumes. On contact with water it forms Barium Hydroxide with evolution of much heat. Solutions are toxic and strongly alkaline.

D.O.T. BARIUM OXIDE, 6.1, UN 1884, PG III

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20