



MATERIAL SAFETY DATA SHEET

1533 W. Henrietta Rd.
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MSDS No. SS 286
Effective Date July 30, 1998

SECTION V HEALTH HAZARD DATA

SS 286

Threshold Limited Value None established (ACGIH 1992-93).
Toxicity data: Oral rat LD50: 720 mg/kg.

Effects of Overexposure **INHALATION:** Can be a route for absorption into body. Bismuth is moderately toxic. **INGESTION:** Moderately toxic with similar symptoms of lead poisoning (abdominal pain, nausea and vomiting). Large doses cause serious diarrhea and death. **SKIN:** A mild irritant if exposed over a long time. **EYES:** Contact may cause mechanical irritation. **CHRONIC EXPOSURE:** Continued absorption into body can lead to permanent kidney damage.

Emergency and First Aid Procedures **INGESTION:** If swallowed, if conscious, give water to drink. Induce vomiting and call physician. Never give anything by mouth to an unconscious person. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get 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	Excessive temperature and heat, moisture/light sensitive.
	Stable	X		

Incompatibility (Materials to Avoid) Acids, reducing agents, finely powdered metals.

Hazardous Decomposition Products When heated to decomposition, emits toxic fumes of bismuth and sodium oxide.

Hazardous Polymerization		Conditions to Avoid	Not applicable.
May Occur	Will Not Occur		
	X		

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled Recover for use if not contaminated. Wearing proper safety equipment and with good ventilation sweep up and place in a suitable container for proper disposal. Wash spill area with water.

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 accordance with federal, state and local regulations.

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.

Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.

Protective Gloves Rubber. **Eye Protection** Chemical safety glasses.

Other Protective Equipment Lab coat, apron, eye wash station, proper gloves, ventilation hood.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing Moisture and light sensitive. Store in a cool, dry well-ventilated area. Protect against physical damage. Wash thoroughly after handling.
Keep container tightly closed when not in use.

Other Precautions Read label on container before using. Do not wear contact lenses when working with chemicals.
Do not breathe dust. Use with adequate ventilation. Avoid contact with skin and eyes. Remove and wash contaminated clothing.

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

Revision No. 3	Date 7/30/98	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	SODIUM BISMUTHATE	<p>CHEMTREC 800-424-9300 Day 716-226-6177</p> <p>NFPA HAZARD RATING</p> <table border="1"> <tr> <td>LEAST</td> <td>SLIGHT</td> <td>MODERATE</td> <td>HIGH</td> <td>EXTREME</td> </tr> <tr> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> </table> <p>HMIS * Health 1 Fire 0 Reactivity 1</p>	LEAST	SLIGHT	MODERATE	HIGH	EXTREME	0	1	2	3	4
LEAST	SLIGHT		MODERATE	HIGH	EXTREME							
0	1		2	3	4							
Chemical Synonyms	Sodium Bismuth Oxide											
Formula	NaBiO ₃											
Unit Size	up to 2.5 Kg.											
C.A.S. No.	12232-99-4											

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Sodium Bismuthate	min. 80%	None established.
Bismuth Oxide: (CAS No. 1304-76-3)	~15%	None established.
Water: (CAS No. 7732-18-5)	Bal.	None established.

CAUTION! MAY BE HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN.

SECTION III PHYSICAL DATA

Melting Point (°F)	Data not listed.	Specific Gravity (H₂O = 1)	Not applicable.
Boiling Point (°F)	Data not listed.	Percent Volatile by Volume (%)	Not applicable.
Vapor Pressure (mm Hg)	Negligible as solid.	Evaporation Rate (=1)	Not applicable.
Vapor Density (Air=1)	Data not listed.		
Solubility in Water	Insoluble in cold water. Decomposes by hot water.		
Appearance & Odor	Yellow or brownish yellow powder; odorless. Somewhat hygroscopic.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

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

SPECIAL FIREFIGHTING PROCEDURES

If involved in fire situation, wear a NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Not considered to be a fire or explosion hazard.

D.O.T. NON-REGULATED.

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