



MATERIAL SAFETY DATA SHEET

1533 W. Henrietta Rd.
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(716) 226-6177

MSDS No. BB 155
Effective Date January 28, 1999

SECTION V HEALTH HAZARD DATA

BB 155

Threshold Limited Value RTECS No. ED4550000 Toxicity data: orl-wmn LDLo: 200 mg/kg, orl-inf LDLo: 934 mg/kg. 10 mg/m³ for Boron oxide. (ACGIH, 1992-93).

Effects of Overexposure **INGESTION OR ABSORPTION:** May cause nausea, vomiting, diarrhea, abdominal cramps. Death has occurred from less than 5 grams in infants and from 5 to 20 grams in adults. **CAUTION:** Several cases of fatal poisoning have occurred following its absorption from granulating wounds and abraded skin areas. May cause CNS effects, liver/kidney disorders.

Emergency and First Aid Procedures **INHALATION:** Remove to fresh air. If symptoms of illness develop, get medical attention. **INGESTION:** If swallowed, if conscious, give one or two glasses of water, induce vomiting and call a physician. Never give anything by mouth to an unconscious person. **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. Loses water when heated above 100°C.
Stable X

Incompatibility (Materials to Avoid) Acetic anhydride, elemental potassium and heat sources.

Hazardous Decomposition Products None specifically known; dust containing Boron compounds.

Hazardous Polymerization **Conditions to Avoid**
May Occur **Will Not Occur** Not applicable.
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. Wash spill area with soap and 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.

Dissolve in water and flush to sewer with copious amounts of water.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type) None should be needed in normal laboratory handling. If dusty conditions prevail, work in a 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 Safety glasses, lab coat, vented hood, proper gloves, and eye wash station.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing Store in a dry place. 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.
Avoid contact with eyes and abraded skin. Avoid breathing dust. Use with adequate ventilation.
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** 1/28/99 **Approved** Michael Raszeja **Chemical Safety Coordinator** MR

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	BORIC ACID	<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 2 Fire 0 Reactivity 0</p>	LEAST	SLIGHT	MODERATE	HIGH	EXTREME	0	1	2	3	4
LEAST	SLIGHT		MODERATE	HIGH	EXTREME							
0	1		2	3	4							
Chemical Synonyms	Boracic Acid											
Formula	H ₃ BO ₃											
Unit Size	100 grams to 2.5 Kg.											
C.A.S. No.	10043-35-3											

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Boric Acid	100%	See Section V.
WARNING! HARMFUL IF SWALLOWED. Irritant.		

SECTION III PHYSICAL DATA

Melting Point (°F)	185°C (365°F) decomposes	Specific Gravity (H₂O = 1)	1.435-1.512 at 20°C
Boiling Point (°F)	N/A	Percent Volatile by Volume (%)	Non-volatile (NA).
Vapor Pressure (mm Hg)	Negligible as solid.	Evaporation Rate	(=1) Not applicable.
Vapor Density (Air=1)	Unknown.		
Solubility in Water	5.6 grams dissolves in 100 mL. of water at room temperature.		
Appearance & Odor	White crystalline solid; no odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable solid (NA).	Flammable Limits in Air % by Volume	NA	Lower	Upper
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Extinguisher Media	None - product inherent fire retardant.				

SPECIAL FIREFIGHTING PROCEDURES

Use any media suitable for extinguishing supporting fire. In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Fire or excessive heat may produce hazardous decomposition products of Boron.

D.O.T. NON-REGULATED.

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