



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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

MSDS No. BB 115  
Effective Date January 27, 1999

## SECTION V HEALTH HAZARD DATA

BB 115

### Threshold Limited Value

None established for this mixture.  
Hydrogen chloride gas - 5 ppm by volume (ceiling) (ACGIH 1992-93).

### Effects of Overexposure

Causes severe burns; permanent visual damage may occur. Dermatitis and photosensitization may result on contact. **INHALATION:** Cough, choking, inflammation and ulceration of respiratory track may occur. **INGESTION:** May cause corrosion of mucous membranes, esophagus, stomach; dysphagia, nausea, vomiting. Exercise appropriate procedures to minimize potential hazards

### Emergency and First Aid Procedures

**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. **INGESTION:** If swallowed, if conscious, drink large quantities of water or milk. Follow with milk of magnesia, beaten eggs or vegetable oil. Call a physician immediately. Never give anything by mouth to an unconscious person. **INHALATION AS MIST:** Remove to fresh air. If illness or discomfort develops, get medical attention.

## SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	If container is warm, slowly open cap to release fumes. Use adequate ventilation.
	Stable	X	

Incompatibility (Materials to Avoid)	Most metals, alkalies, strong oxidants, acetic anhydride, oleum, amines, vinyl acetate.
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Hazardous Decomposition Products	Hydrochloric acid gas evolved by heating, carbides, reacts with metals to evolve hydrogen gas-explosive.
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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	Remove spills immediately by flushing away with lots of water. Carefully neutralizing with soda ash or lime stone as carbon dioxide is given off.
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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. Neutralize with alkali and flush to sewer if permitted by disposal regulations. Disposal by a disposal contractor may otherwise be needed.
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## SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)		Work in fume hood. Wear a NIOSH/MSHA-approved acid vapor respirator if ventilation is inadequate.			
Ventilation	Local Exhaust	Yes.	Special	No.	
	Mechanical (General)	Yes.	Other	No.	
Protective Gloves		Rubber.		Eye Protection	Chemical safety glasses.
Other Protective Equipment	Goggles, smock, apron, ventilation hood, proper gloves, eye wash station.				

## SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool, well-ventilated area, away from highly flammable or oxidizing substances. 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.
	Loosen closure cautiously. Use with adequate ventilation. Avoid contact with skin, eyes and clothing. 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
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	BIAL'S REAGENT
Chemical Synonyms	Bial's Reagent
Formula	Mixture. See Section II.
Unit Size	up to 4 Lt.
C.A.S. No.	Mixture. See Section II.

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	2

HMIS \*

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Hydrochloric Acid: (CAS No. 7647-01-0)	30%	See Section V.
Orcinol: (CAS No. 504-15-4)	0.2%	None established.
Ferric Chloride: (CAS No. 7705-08-0) Water: (CAS No. 7732-18-5)	0.02% 69.78%	None established. None established.
<b>DANGER! CORROSIVE! CAUSES SEVERE BURNS. VAPOR HARMFUL. MAY BE FATAL IF SWALLOWED.</b>		

## SECTION III PHYSICAL DATA

Melting Point (°F)	Not applicable.	Specific Gravity (H <sub>2</sub> O = 1)	1.194 (15°/4°C)
Boiling Point (°F)	Approx. 108°C (227°F)	Percent Volatile by Volume (%)	69.78%
Vapor Pressure (mm Hg)	212 mm at 20°C (HCl)	Evaporation Rate (Ether = 1)	Greater than 1.
Vapor Density (Air=1)	1.3 (HCl)		
Solubility in Water	Complete.		
Appearance & Odor	Blue-violet liquid; sharp, pungent, irritating odor.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Not flammable (NA).	Flammable Limits in Air % by Volume	None	Lower -----	Upper -----
Extinguisher Media	When involved in fire use water.				

SPECIAL FIREFIGHTING PROCEDURES	Use water, neutralize with chemically basic substances such as soda ash or slaked lime. Wear full protective clothing and a NIOSH/MSHA-approved self-contained breathing apparatus.
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(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 154)

UNUSUAL FIRE AND EXPLOSION HAZARDS	<b>DANGEROUS:</b> When heated to decomposition, it emits highly toxic fumes of chlorides; will react with water or steam to produce toxic and corrosive fumes. Not combustible, but contact with common metals produces hydrogen which may form explosive mixtures with air. Soluble in water.
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D.O.T. Corrosive liquids, n.o.s., ( Hydrochloric acid, Ferric chloride), 8, UN 1760, PGII

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