



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

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MSDS No. IX 180
Effective Date March 12, 1999

SECTION V HEALTH HAZARD DATA

IX 180

Threshold Limited Value None established for this solution. (ACGIH 1992-93). Toxicity: Oral-human TWA: As Iodine (Ceiling limit) 0.1 ppm; 1 mg/m³ (Air) LDLO: 2000 mg/kg.

Effects of Overexposure Contact as fumes or solution is intensely irritating to eyes, skin and mucous membranes. May cause delayed lung injury. **INGESTION:** Of large quantities causes abdominal pain, vomiting and diarrhea. In severe cases purging, excessive thirst and circulatory failure may develop.

Emergency and First Aid Procedures **INGESTION:** If swallowed, if conscious, give one or two glasses of milk, followed by a starch, flour or egg white, as a water solution. Get immediate medical attention. Never give anything by mouth to an unconscious person. **EYES:** Flush thoroughly with water for 15 minutes, occasionally lifting upper and lower eyelids. Get immediate medical attention. **INHALATION:** Remove to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. **SKIN:** Flush thoroughly with water.

SECTION VI REACTIVITY DATA

Stability	Unstable		Conditions to Avoid	Excessive temperature or heat.
	Stable	X		

Incompatibility (Materials to Avoid) Contact of gaseous ammonia or its solutions with free iodine should be avoided to prevent the formation of the explosive "nitrogen iodide". Acetaldehyde, Sodium Azide, Sodium Hydride.

Hazardous Decomposition Products	Free iodine.
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Hazardous Polymerization	Conditions to Avoid
May Occur	Will Not Occur
	X
	Not applicable.

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled Absorb spill in vermiculite, sand, earth, paper towel and place in a suitable container for disposal. Wash floor or spill area with a 5-10% Sodium thiosulfate solution.

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.

Work in a ventilation hood and wearing proper safety equipment, collect waste iodine in a large beaker. Cover with a large volume of water. Slowly add, while stirring soda ash or sodium thiosulfate until all of the iodine has been dissolved and solution is colorless. 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 at room temperature. If needed, work in a ventilation hood.

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

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

Precautions to be Taken in Handling & Storing Store in a cool, dry, well-ventilated area. Remove all contaminated clothing and shoes. Wash before reuse. 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 skin and eyes.
Contact with skin will leave yellow iodine stain.

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

Revision No. 6	Date 3/12/99	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	IODINE SOLUTION FOR GRAM'S STAIN
Chemical Synonyms	Gram's Iodine Solution
Formula	Mixture
Unit Size	up to 3.785 Lt.
C.A.S. No.	Mixture.

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

Health	3
Fire	0
Reactivity	1

NFPA HAZARD RATING

LEAST	SLIGHT	MODERATE	HIGH	EXTREME
0	1	2	3	4

HMIS *

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
* (Iodine-Potassium Iodide Water Solution)	See: *	See Section V.

WARNING! CORROSIVE! HARMFUL IF INHALED OR SWALLOWED

CAUSES IRRITATION TO SKIN, EYES AND MUCOUS MEMBRANES.

SECTION III PHYSICAL DATA

Melting Point (°F)	May freeze at 0°C (32°F)	Specific Gravity (H ₂ O = 1)	1.0
Boiling Point (°F)	Approx. 100°C (212°F)	Percent Volatile by Volume (%)	95%
Vapor Pressure (mm Hg)	14 (water)	Evaporation Rate (Ether = 1)	Greater than 1.
Vapor Density (Air=1)	0.7 (water)		
Solubility in Water	Complete.		
Appearance & Odor	Deep-amber color liquid; iodine 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	Use any media suitable for extinguishing supporting fire.				

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing. Use flooding amounts of water in early stages of fire.

* Iodine: (CAS No. 7553-56-2)...2%
Potassium Iodide: (CAS No. 7681-11-0)...3%
Water: (CAS No. 7732-18-5)...95%

UNUSUAL FIRE AND EXPLOSION HAZARDS

When heated, emits toxic and corrosive, violet in color, fumes of iodine. Iodine is corrosive to metals and to all body tissues.

D.O.T. NON-REGULATED.

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