



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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MSDS No.: PP0600  
Effective Date: January 1, 2007

## SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

<b>Product</b>	Potassium Hydroxide, 0.1 Molar Solution (0.1N)
<b>Chemical Synonyms</b>	Potassium Hydroxide, Water Solution
<b>Formula</b>	Mixture.
<b>Unit Size</b>	up to 3.785 Lt.
<b>C.A.S. No.</b>	Mixture.

 <b>NFPA</b> HAZARD RATING MINIMAL SLIGHT MODERATE SERIOUS SEVERE 0 1 2 3 4	<b>CHEMTREC</b> <b>800-424-9300</b> Day 585-226-6177	<table border="1"> <tr> <td>Health</td> <td>3</td> </tr> <tr> <td>Fire</td> <td>0</td> </tr> <tr> <td>Reactivity</td> <td>1</td> </tr> </table>	Health	3	Fire	0	Reactivity	1
	Health	3						
Fire	0							
Reactivity	1							
		<b>HMIS *</b>						

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Potassium hydroxide: CAS No. 1310-58-3	0.57%	STEL: C 2 mg/m <sup>3</sup>
Water: CAS No. 7732-18-5	99.43%	
<b>DANGER! CORROSIVE!</b>		
<b>HARMFUL IF SWALLOWED. CAUSES BURNS.</b>		

## SECTION III PHYSICAL DATA

Melting Point (°F)	Freezes @ ~ 0°C (32°F)	Specific Gravity (H <sub>2</sub> O = 1)	~ 1.1
Boiling Point (°F)	~ 100°C (212°F)	Percent Volatile by Volume (%)	99.43%
Vapor Pressure (mm Hg)	14 (water)	Evaporation Rate (Water = 1)	< 1
Vapor Density (Air=1)	0.7 (water)		
Solubility in Water	Complete.		
Appearance & Odor	Clear, colorless liquid; no odor.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point (Method Used)</b>	Non-flammable.	<b>Flammable Limits in Air % by Volume</b>	N/A	Lower	Upper
<b>Extinguisher Media</b>	Water spray, foam, carbon dioxide, dry chemical.				

### SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing. Must include complete eye protection. Flood with water, using care not to splatter or splash this material.

(2004 EMERGENCY RESPONSE GUIDEBOOK, RSPA P 5800.9, GUIDE PAGE NO. 154)

### UNUSUAL FIRE AND EXPLOSION HAZARDS

In fire conditions, water may evaporate from this material causing hazardous decomposition materials to be formed as dust or fume. Contact with some metals can generate hydrogen gas. A severe eye hazard; solid or concentrated solution destroys tissue on contact.

## SECTION V HEALTH HAZARD DATA

PP0600

<b>Threshold Limited Value</b>	None established for this mixture. ACGIH 2001. Toxicity data: RTECS # TT2100000 LD50: oral rat: 273 mg/kg. For Potassium hydroxide.
<b>Effects of Overexposure</b>	Harmful if swallowed, inhaled or absorbed through skin. Material is extremely destructive to tissues of the mucous membranes, upper respiratory tract, skin and eyes. Inhalation may be fatal as a result of spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Target organs: None known.

### Emergency and First Aid Procedures

**INGESTION:** Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person. **EYES:** Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

## SECTION VI REACTIVITY DATA

<b>Stability</b>	Unstable	Conditions to Avoid	Excessive temperature and heat to cause evaporation.
	Stable	X	
<b>Incompatibility (Materials to Avoid)</b>	Acids, aluminum, halogens, nitro compounds, organic materials, acid chlorides, acid anhydrides, magnesium, copper, tin and zinc.		
<b>Hazardous Decomposition Products</b>	Hydrogen gas. Generates flammable and/or explosive hydrogen gas in contact with metals.		
<b>Hazardous Polymerization</b>	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

Wearing protective clothing, carefully absorb spilled material with an inert dry material, sweep up and place in a suitable container for proper disposal. Flush 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.

Contract with a licensed waste disposal agency.

## SECTION VIII SPECIAL PROTECTION INFORMATION

<b>Respiration Protection (Specify Type)</b>	None needed in normal laboratory handling. If misty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA-approved dust mask or respirator.			
<b>Ventilation</b>	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.
<b>Protective Gloves</b>	Rubber.		<b>Eye Protection</b>	Chemical safety goggles or face shield where appropriate.
<b>Other Protective Equipment</b>	Goggles, lab coat, 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 place. Separate from acids, metals, explosives, organic peroxides and easily ignitable materials. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.

### Other Precautions

Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Product is deliquescent and absorbs water and Carbon dioxide from air. Potassium hydroxide and trichloroethylene are especially hazardous since they react to form spontaneously flammable dichloroacetylene. Remove and wash contaminated clothing.

**D.O.T.** Potassium hydroxide, solution, 8, UN1814, PG II, Ltd Qty ≤ 1 Lt.

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

Revision No. 8 Date 01/01/07 Approved James A. Bertsch Chemical Safety Coordinator JAB

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