



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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MSDS No. PP 440  
Effective Date April 19, 1999

## SECTION V

## HEALTH HAZARD DATA

PP 440

### Threshold Limited Value

None established; (ACGIH 1992-93). Nuisance dust: respirable fraction - 5 mg/m<sup>3</sup>, total - 15 mg/m<sup>3</sup>. Acute oral toxicity in Rats: 1870 mg/kg. Toxic doses to humans about 5 grams.

### Effects of Overexposure

**TARGET ORGANS AFFECTED:** Liver, kidneys, blood. **INHALATION:** Repeated or prolonged exposure to high dust concentration may result in methemoglobin formation and rupturing of red blood cells. May cause cyanosis with bluish skin. **SKIN AND EYE CONTACT:** Prolonged exposure to dust may cause irritation to skin, mucous membranes and eyes. Direct contact may cause burns. **INGESTION:** Of relatively large quantities, may be fatal. Causes nausea, vomiting, diarrhea, abdominal pain, confusion and convulsions.

### Emergency and First Aid Procedures

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. **SKIN:** Flush thoroughly with water, then wash with mild soap and water. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **INGESTION:** If swallowed, if conscious, give one or two glasses of water to drink. Call physician immediately. Never give anything by mouth to an unconscious person.

## SECTION VI

## REACTIVITY DATA

### Stability

Unstable  
Stable

### Conditions to Avoid

Excessive temperature and heat.

### Incompatibility (Materials to Avoid)

Strong acids, oxidizable materials, organic substances, reducing agents, finely divided metals, sulfur, phosphorous and ammonia compounds.

### Hazardous

### Decomposition Products

Oxygen, Chlorine, oxides of Potassium.

### Hazardous Polymerization

### Conditions to Avoid

May Occur

Will Not Occur

Not applicable.

## SECTION VII

## SPILL OR LEAK PROCEDURES

### Steps to be taken in case material is released or spilled

Flush to sewer with copious amounts of water.  
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.

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 fume hood or wear a NIOSH/MSHA-approved respirator or dust mask.

### Ventilation

Local Exhaust

Recommended.

Special

No.

Mechanical (General)

Recommended.

Other

No.

### Protective Gloves

Rubber, vinyl, etc.

### Eye Protection

Chemical safety glasses.

### Other Protective Equipment

Goggles, smock, apron, eye wash station, ventilation hood, proper gloves, fire extinguisher.

## SECTION IX

## SPECIAL PRECAUTIONS

### Precautions to be Taken in Handling & Storing

Keep container tightly closed when not in use.

Store in a cool, dry place away from flammables or combustible materials. Clothing contaminated with chlorate or its solution is **DANGEROUSLY FLAMMABLE**. Remove clothing and keep wet until washed thoroughly with water. Do not get in eyes, on skin, or on clothing.

### Other Precautions

Read label on container before using. Do not wear contact lenses when working with chemicals.

Do not use water to clean spills on porous or wood floors, surfaces will become impregnated and extremely hazardous. Wash thoroughly after handling.

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

Revision No. 6

Date

4/19/99

Approved

Michael Raszeja

Chemical Safety Coordinator

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## SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	POTASSIUM CHLORATE
Chemical Synonyms	Potassium Chlorate
Formula	KClO <sub>3</sub>
Unit Size	up to 2.5 Kg.
C.A.S. No.	3811-04-9

0

1

1

Oxy

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

Health 1  
Fire 0  
Reactivity 3

NFPA  
HAZARD RATING  
LEAST SLIGHT MODERATE HIGH EXTREME  
0 1 2 3 4

HMIS \*  
3 4

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Potassium Chlorate	99.7%	See Section V.
<b>WARNING! STRONG OXIDIZER! CONTACT WITH OTHER</b>		
<b>MATERIAL MAY CAUSE FIRE OR EXPLOSION. HARMFUL IF SWALLOWED</b>		
<b>OR INHALED. CAUSES SKIN AND EYE IRRITATION.</b>		

## SECTION III PHYSICAL DATA

Melting Point (°F)	356°C (672°F)	Specific Gravity (H <sub>2</sub> O = 1)	2.337
Boiling Point (°F)	Decomposes at 400°C (752°F)	Percent Volatile by Volume (%)	N/A
Vapor Pressure (mm Hg)	Negligible as solid.	Evaporation Rate (≈1)	N/A
Vapor Density (Air=1)	N/A		
Solubility in Water	6.8 grams per 100 mL. water at 20°C.		
Appearance & Odor	Colorless, white granules or powder; no 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	Water spray, dry chemical, foam.				

### SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and protective clothing.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 140)

### UNUSUAL FIRE AND EXPLOSION HAZARDS

Powerful oxidizing material. Forms explosive mixtures with combustible, organic or other easily oxidizable materials. These mixtures are easily ignited by friction or heat. Containers may rupture when involved in fire. Explodes with sulfuric acid.

D.O.T. Potassium chlorate, 5.1, UN 1485, PG II

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