



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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MSDS No. PP 516  
Effective Date July 30, 1998

## SECTION V HEALTH HAZARD DATA

PP 516

**Threshold Limited Value** RTECS No. HX7680000 Toxicity data: orl-rat LD50: 20-50 mg/kg. TWA: 0.5 mg (as Chromium) per m<sup>3</sup>. OSHA (ceiling): 0.1 mg (CrO<sub>3</sub>) per m<sup>3</sup>. (ACGIH 1992-93).

**Effects of Overexposure** **INHALATION:** Chromate dusts or mists can cause ulceration and perforation of nasal septum, as well as irritation and ulceration of the respiratory system. Overexposure to chromium compounds may cause lung cancer-risk. **INGESTION:** Can be harmful or fatal if swallowed. Toxic effects may not appear right away. A systemic poison; chromates are primarily toxic to the kidneys, liver, and gastrointestinal tract. Dusts and solutions can cause irritation. Contact with breaks in the skin can cause "chrome sores".

**Emergency and First Aid Procedures** **SKIN:** Wash with soap and flush with plenty of water without delay. Remove contaminated clothing and wash before reuse. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention. **INGESTION:** If swallowed, if conscious, immediately have victim drink water and induce vomiting. Repeat until vomit fluid is clear. Never give anything by mouth to an unconscious person. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **Get medical attention** for ingestion, inhalation, irritation, chemical or thermal burns or "chrome sores", (skin ulcers). Chromates are skin sensitizers. Skin absorption has been reported. **EYES:** Dusts, mists, or solutions can cause severe irritation and conjunctivitis.

## SECTION VI REACTIVITY DATA

<b>Stability</b>	<b>Unstable</b>		<b>Conditions to Avoid</b>	Excessive temperature and heat.
	<b>Stable</b>	X		

**Incompatibility (Materials to Avoid)** Reducing agents. Most organic substances, bromides, iodides, chlorides, hypophosphites, sulfites, sulfides. Combustible materials.

**Hazardous Decomposition Products** Potassium chromate, oxygen gas and chromium oxide.

<b>Hazardous Polymerization</b>	<b>Conditions to Avoid</b>	
	<b>May Occur</b>	<b>Will Not Occur</b>
		X

Not applicable.

## SECTION VII SPILL OR LEAK PROCEDURES

**Steps to be taken in case material is released or spilled** Eliminate all ignition sources. Wear proper protective clothing. Sweep up and place in a suitable container. Flush spill area with water. Keep wash water out of sewers. Collect for disposal.

**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. Dispose of in accordance with federal, state and local regulations.

## SECTION VIII SPECIAL PROTECTION INFORMATION

**Respiration Protection (Specify Type)** Not required in normal laboratory handling. If dusty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA-approved dust mask or respirator.

<b>Ventilation</b>	<b>Local Exhaust</b>	<b>Recommended.</b>	<b>Special</b>	<b>No.</b>
	<b>Mechanical (General)</b>	<b>Recommended.</b>	<b>Other</b>	<b>Adequate to maintain below exposure limit.</b>

**Protective Gloves** Rubber. **Eye Protection** Chemical safety glasses.

**Other Protective Equipment** Goggles, smock, apron, eye wash station, proper gloves, ventilation hood.

## SECTION IX SPECIAL PRECAUTIONS

**Precautions to be Taken in Handling & Storing** Store in a cool, dry, well-ventilated area, away from reducing agents. 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. **NOTE:** Chromium compounds in the form of chromates and dichromates have been found to be mutagenic in bacterial and mammalian cells, including those of the Chinese hamster. Recent studies indicate a significant risk of lung cancer among long-term employees of the chromate producing industry.

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

<b>Revision</b> No. 6	<b>Date</b> 7/30/98	<b>Approved</b> Michael Raszeja	<b>Chemical Safety Coordinator</b> 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

<b>Product</b>	POTASSIUM DICHROMATE	 <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 *</p> <table border="1"> <tr> <td>Health</td> <td>4</td> </tr> <tr> <td>Fire</td> <td>0</td> </tr> <tr> <td>Reactivity</td> <td>3</td> </tr> </table>	LEAST	SLIGHT	MODERATE	HIGH	EXTREME	0	1	2	3	4	Health	4	Fire	0	Reactivity	3
LEAST	SLIGHT		MODERATE	HIGH	EXTREME													
0	1		2	3	4													
Health	4																	
Fire	0																	
Reactivity	3																	
<b>Chemical Synonyms</b>	Potassium Bichromate																	
<b>Formula</b>	K <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>																	
<b>Unit Size</b>	up to 2.5 Kg.																	
<b>C.A.S. No.</b>	7778-50-9																	

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Potassium Dichromate	100%	See Section V.
<b>DANGER! POISON!</b>  <b>STRONG OXIDIZER! HARMFUL IF INHALED,</b>		
<b>SWALLOWED OR ABSORBED THROUGH SKIN. CAUSES IRRITATION. CANCER HAZARD.</b>		
<b>MAY CAUSE RASH OR ULCERS ON OPEN SKIN OR MUCOUS MEMBRANES.</b>		

## SECTION III PHYSICAL DATA

Melting Point (°F)	398°C (748°F)	Specific Gravity (H <sub>2</sub> O = 1)	2.68
Boiling Point (°F)	Not determined.	Percent Volatile by Volume (%)	Data not listed.
Vapor Pressure (mm Hg)	No data available.	Evaporation Rate ( =1)	Data not listed.
Vapor Density (Air=1)	Data not listed.		
Solubility in Water	11.7 grams per 100 mL. water at 20°C.		
Appearance & Odor	Orange-red crystals; no odor.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point (Method Used)</b>	Non-flammable (NA).	<b>Flammable Limits in Air % by Volume</b>	NA	<b>Lower</b>	<b>Upper</b>
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**Extinguisher Media** Use any media suitable for extinguishing supporting fire.

## SPECIAL FIREFIGHTING PROCEDURES

If fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7 GUIDE PAGE NO. 141)

## UNUSUAL FIRE AND EXPLOSION HAZARDS

Although not flammable, may intensify fire when in contact with combustible materials. Water runoff may contain chromium compounds and should not be allowed to enter sewers or waterways. Use a NIOSH/MSHA-approved, self-contained breathing apparatus if exposure to chromium dust or mist is possible.

D.O.T. TOXIC SOLIDS, OXIDIZING, n.o.s., (POTASSIUM DICHROMATE), 6.1, UN 3086, PG II

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