

# MATERIAL SAFETY DATA SHEET

(513) 860-4949

MSDS No.: PP0680  
Effective Date: January 1, 2007

SECTION I NAME		24 HOUR EMERGENCY ASSISTANCE	
Product	Potassium Oxalate, Monohydrate	<p>CHEMTREC 800-424-9300 Day 585-226-6177</p> <p>NFPA</p> <p>HAZARD RATING MINIMAL SLIGHT MODERATE SERIOUS SEVERE 0 1 2 3 4</p> <p>HMIS * Health 2 Fire 0 Reactivity 0</p>	
Chemical Synonyms	Oxalic Acid Dipotassium Salt		
Formula	$K_2C_2O_4 \cdot H_2O$		
Unit Size	up to 2.5 Kg.		
C.A.S. No.	6487-48-5		

SECTION II INGREDIENTS OF MIXTURES		
Principal Component(s)	%	TLV Units
Potassium oxalate	100%	None established.
DANGER! MAY BE FATAL IF SWALLOWED OR INHALED.		
SEVERE IRRITANT TO SKIN, EYES AND MUCOUS MEMBRANES.		

SECTION III PHYSICAL DATA			
Melting Point (°F)	Decomposes @ 160°C (320°F)	Specific Gravity (H <sub>2</sub> O = 1)	2.127 at 39°C
Boiling Point (°F)	Decomposes.	Percent Volatile by Volume (%)	N/A
Vapor Pressure (mm Hg)	N/A	Evaporation Rate (=1)	N/A
Vapor Density (Air=1)	N/A		
Solubility in Water	33 grams per 100 mL. water at 20°C.		
Appearance & Odor	Colorless, transparent crystals 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
Extinguisher Media	Water spray; carbon dioxide (CO <sub>2</sub> ); dry chemical (ABC).		

SPECIAL FIREFIGHTING PROCEDURES	
	In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
(2004 EMERGENCY RESPONSE GUIDEBOOK, RSPA P 5800.9, GUIDE PAGE NO. 154)	

UNUSUAL FIRE AND EXPLOSION HAZARDS	
	Dangerous when heated to decomposition, emits toxic fumes. Can react vigorously with oxidizing materials.

D.O.T.	Toxic solids, organic, n.o.s., (Potassium oxalate), 6.1, UN2811, PG III
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Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

## SECTION V HEALTH HAZARD DATA

Threshold Limited Value	None established (ACGIH 2001). MLD S.C. in mice: 150 mg per kg. Nuisance dust: Respiratory fraction - 5 mg/m <sup>3</sup> ; Total dust - 1 mg/m <sup>3</sup> .
Effects of Overexposure	<b>SKIN AND EYES:</b> May cause severe eye and skin irritation or burns. <b>INHALATION:</b> Causes severe irritation to mucous membranes and upper respiratory tract. <b>INGESTION:</b> Has caustic effect on mouth, esophagus and stomach. May cause gastroenteritis, with pain and vomiting. Target organs: Kidneys, liver, heart, central nervous system.

Emergency and First Aid Procedures	
	<b>INGESTION:</b> 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. <b>EYES:</b> 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. <b>SKIN:</b> Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. <b>INHALATION:</b> Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SECTION VI REACTIVITY DATA		
Stability	Unstable Stable	Conditions to Avoid Excessive temperature and heat.
Incompatibility (Materials to Avoid)	Strong oxidizers.	
Hazardous Decomposition Products	Thermal decomposition may release toxic fumes of carbon monoxide and potassium oxides.	
Hazardous Polymerization	May Occur Will Not Occur	Conditions to Avoid Not applicable.

SECTION VII SPILL OR LEAK PROCEDURES	
Steps to be taken in case material is released or spilled	Ventilate area. Wear suitable protective clothing. Sweep up and place in a suitable container for proper disposal. Flush spill area with 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.  Dispose of in an approved incinerator or contract with an approved and licensed disposal agency.
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SECTION VIII SPECIAL PROTECTION INFORMATION			
Respiration Protection (Specify Type)	None needed in normal laboratory handling. If dusty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA-approved dust mask or respirator.		
Ventilation	Local Exhaust Mechanical (General)	Recommended. Recommended.	Special Other
Protective Gloves	Rubber.	Eye Protection	Chemical safety glasses.
Other Protective Equipment	Goggles, smock, apron, eye wash station, ventilation hood, proper gloves.		

SECTION IX SPECIAL PRECAUTIONS	
Precautions to be Taken in Handling & Storing	Store in a cool, dry place away from sources of heat or ignition. 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.  Avoid contact with skin and eyes. Do not take internally. Avoid breathing dust. Use with adequate ventilation. Remove and wash contaminated clothing.

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