

POTASSIUM

PTM

CAUTIONARY RESPONSE INFORMATION				4. FIRE HAZARDS		7. SHIPPING INFORMATION											
Common Synonyms Potassium oxalate	Solid	Silver-white	Odorless	<p>4.1 Flash Point: Not pertinent (combustible solid)</p> <p>4.2 Flammable Limits in Air: Not pertinent</p> <p>4.3 Fire Extinguishing Agents: Graphite, sand, sodium chloride</p> <p>4.4 Fire Extinguishing Agents Not to Be Used: Water, foam, carbon dioxide, or halogenated hydrocarbons</p> <p>4.5 Special Hazards of Combustion Products: Currently not available</p> <p>4.6 Behavior in Fire: Reacts violently with water, forming flammable and explosive hydrogen gas. May ignite spontaneously in air.</p> <p>4.7 Auto Ignition Temperature: Currently not available</p> <p>4.8 Electrical Hazards: Not pertinent</p> <p>4.9 Burning Rate: Not pertinent</p> <p>4.10 Adiabatic Flame Temperature: Currently not available</p> <p>4.11 Stoichiometric Air to Fuel Ratio: 2.4 (calc.)</p> <p>4.12 Flame Temperature: Currently not available</p> <p>4.13 Combustion Molar Ratio (Reactant to Product): 1.0 (calc.)</p> <p>4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed</p>		<p>7.1 Grades of Purity: Commercial, 99.9+% (Shipped under oil)</p> <p>7.2 Storage Temperature: Ambient</p> <p>7.3 Inert Atmosphere: Inerted</p> <p>7.4 Venting: Pressure-vacuum</p> <p>7.5 IMO Pollution Category: Currently not available</p> <p>7.6 Ship Type: Currently not available</p> <p>7.7 Barge Hull Type: Currently not available</p>											
<p>Reacts violently with water. Flammable gas is produced.</p> <p>Keep people away. Avoid contact with solid. Evacuate. Shut off ignition sources and call fire department. Notify local health and pollution control agencies. Protect water intakes.</p>																	
Fire	<p>Combustible. IGNITES WHEN EXPOSED TO WATER OR MOISTURE. Flammable gas is produced on contact with water. Extinguish with dry graphite, soda ash, or other inert powder. DO NOT USE WATER OR FOAM ON FIRE. DO NOT USE WATER OR FOAM ON ADJACENT FIRES.</p>																
Exposure	<p>CALL FOR MEDICAL AID.</p> <p>SOLID Will burn skin and eyes. Flush affected areas with plenty of water. IF IN EYES, hold eyelids open and flush with plenty of water.</p>																
Water Pollution	<p>HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.</p>																
1. CORRECTIVE RESPONSE ACTIONS	<p>Stop discharge Dilute and disperse Chemical and Physical Treatment: Neutralize</p>			2. CHEMICAL DESIGNATIONS	<p>2.1 CG Compatibility Group: Not listed.</p> <p>2.2 Formula: K</p> <p>2.3 IMO/UN Designation: Not listed</p> <p>2.4 DOT ID No.: 2257</p> <p>2.5 CAS Registry No.: 7440-09-7</p> <p>2.6 NAERG Guide No.: 138</p> <p>2.7 Standard Industrial Trade Classification: 52228</p>												
<p>3. HEALTH HAZARDS</p> <p>3.1 Personal Protective Equipment: Goggles or face shield; rubber gloves</p> <p>3.2 Symptoms Following Exposure: Contact with eyes or skin causes severe burns.</p> <p>3.3 Treatment of Exposure: EYES or SKIN: flush with water; treat caustic burns.</p> <p>3.4 TLV-TWA: Not listed.</p> <p>3.5 TLV-STEL: Not listed.</p> <p>3.6 TLV-Ceiling: Not listed.</p> <p>3.7 Toxicity by Ingestion: Not pertinent</p> <p>3.8 Toxicity by Inhalation: Currently not available.</p> <p>3.9 Chronic Toxicity: Currently not available</p> <p>3.10 Vapor (Gas) Irritant Characteristics: Currently not available</p> <p>3.11 Liquid or Solid Characteristics: Currently not available</p> <p>3.12 Odor Threshold: Odorless</p> <p>3.13 IDLH Value: Not listed.</p> <p>3.14 OSHA PEL-TWA: Not listed.</p> <p>3.15 OSHA PEL-STEL: Not listed.</p> <p>3.16 OSHA PEL-Ceiling: Not listed.</p> <p>3.17 EPA AEGL: Not listed</p>																	
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<p>5. CHEMICAL REACTIVITY</p> <p>5.1 Reactivity with Water: Reacts violently to form flammable hydrogen gas and a strong caustic solution.</p> <p>5.2 Reactivity with Common Materials: May ignite combustible materials if they are damp</p> <p>5.3 Stability During Transport: Stable, if protected from air and moisture</p> <p>5.4 Neutralizing Agents for Acids and Caustics: Caustic formed by reaction with water should be flushed with water, then area can be rinsed with dilute acetic acid.</p> <p>5.5 Polymerization: Not pertinent</p> <p>5.6 Inhibitor of Polymerization: Not pertinent</p>																	
<p>6. WATER POLLUTION</p> <p>6.1 Aquatic Toxicity: 80 ppm/24 hr/mosquito fish/TL₅₀/fresh water</p> <p>6.2 Waterfowl Toxicity: Currently not available</p> <p>6.3 Biological Oxygen Demand (BOD): None</p> <p>6.4 Food Chain Concentration Potential: None</p> <p>6.5 GESAMP Hazard Profile: Not listed</p>																	
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<p>8. HAZARD CLASSIFICATIONS</p> <p>8.1 49 CFR Category: Dangerous When Wet</p> <p>8.2 49 CFR Class: 4.3</p> <p>8.3 49 CFR Package Group: I</p> <p>8.4 Marine Pollutant: No</p> <p>8.5 NFPA Hazard Classification:</p> <table border="0"> <tr> <td>Category</td> <td>Classification</td> </tr> <tr> <td>Health Hazard (Blue)</td> <td>3</td> </tr> <tr> <td>Flammability (Red)</td> <td>3</td> </tr> <tr> <td>Instability (Yellow)</td> <td>2</td> </tr> <tr> <td>Special (White)</td> <td>W</td> </tr> </table> <p>8.6 EPA Reportable Quantity: Not listed.</p> <p>8.7 EPA Pollution Category: Not listed.</p> <p>8.8 RCRA Waste Number: Not listed</p> <p>8.9 EPA FWPCA List: Not listed</p>								Category	Classification	Health Hazard (Blue)	3	Flammability (Red)	3	Instability (Yellow)	2	Special (White)	W
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<p>9. PHYSICAL & CHEMICAL PROPERTIES</p> <p>9.1 Physical State at 15°C and 1 atm: Solid</p> <p>9.2 Molecular Weight: 39</p> <p>9.3 Boiling Point at 1 atm: 1,425°F = 774°C = 1,047°K</p> <p>9.4 Freezing Point: 145°F = 63°C = 336°K</p> <p>9.5 Critical Temperature: Not pertinent</p> <p>9.6 Critical Pressure: Not pertinent</p> <p>9.7 Specific Gravity: 0.86 at 20°C (solid)</p> <p>9.8 Liquid Surface Tension: Not pertinent</p> <p>9.9 Liquid Water Interfacial Tension: Not pertinent</p> <p>9.10 Vapor (Gas) Specific Gravity: Not pertinent</p> <p>9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent</p> <p>9.12 Latent Heat of Vaporization: Not pertinent</p> <p>9.13 Heat of Combustion: -2,003 Btu/lb = -1,113 cal/g = -46.57 X 10⁵ J/kg</p> <p>9.14 Heat of Decomposition: Not pertinent</p> <p>9.15 Heat of Solution: -2,104 Btu/lb = -1,169 cal/g = -48.91 X 10⁵ J/kg</p> <p>9.16 Heat of Polymerization: Not pertinent</p> <p>9.17 Heat of Fusion: 14.6 cal/g</p> <p>9.18 Limiting Value: Currently not available</p> <p>9.19 Reid Vapor Pressure: Currently not available</p>																	
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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
NOT PERTINENT			NOT PERTINENT		NOT PERTINENT		NOT PERTINENT

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
REACTS			NOT PERTINENT		NOT PERTINENT		NOT PERTINENT