

# POTASSIUM PEROXIDE

POP

CAUTIONARY RESPONSE INFORMATION			
Common Synonyms Potassium superoxide	Solid (powder)	Yellow	Odorless
Sinks and mixes violently with water.			
	<b>Evacuate.</b> Keep people away. Avoid contact with solid and dust. Shut off ignition sources and call fire department. Notify local health and pollution control agencies. Protect water intakes.		
<b>Fire</b>	Not flammable. Will increase the intensity of a fire. May cause fire on contact with combustibles. Combat fires from safe distance or protected location. Flood discharge area with water.		
<b>Exposure</b>	<b>CALL FOR MEDICAL AID.</b> <b>DUST</b> Irritating to eyes, nose and throat. If inhaled will cause coughing or difficult breathing. If in eyes, hold eyelids open and flush with plenty of water. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen.  <b>SOLID</b> Will burn skin and eyes. If swallowed will cause nausea. Remove contaminated clothing and shoes. Flush affected areas with plenty of water. IF IN EYES, hold eyelids open and flush with plenty of water. IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk. IF SWALLOWED and victim is UNCONSCIOUS OR HAVING CONVULSIONS, do nothing except keep victim warm. DO NOT INDUCE VOMITING.		
<b>Water Pollution</b>	<b>HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS.</b> May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.		

1. CORRECTIVE RESPONSE ACTIONS	2. CHEMICAL DESIGNATIONS
Dilute and disperse Stop discharge Chemical and Physical Treatment: Neutralize Do not add water to undissolved material	2.1 CG Compatibility Group: Not listed. 2.2 Formula: K <sub>2</sub> O <sub>2</sub> 2.3 IMO/UN Designation: 5.1/1491 2.4 DOT ID No.: 1491 2.5 CAS Registry No.: Currently not available 2.6 NAERG Guide No.: 144 2.7 Standard Industrial Trade Classification: 52264
<b>3. HEALTH HAZARDS</b>	
3.1 Personal Protective Equipment: Dust mask; goggles or face shield; protective gloves	
3.2 Symptoms Following Exposure: Inhalation causes respiratory irritation. Ingestion causes severe burns of mouth and stomach. Contact with eyes or skin causes irritation and caustic burns.	
3.3 Treatment of Exposure: INHALATION: remove from exposure; support respiration. INGESTION: give large amount of water; do NOT induce vomiting; get medical attention. EYES: irrigate with large quantities of water for at least 15 min.; get medical attention for caustic burns. SKIN: flush with water; treat caustic burns.	
3.4 TLV-TWA: Not listed. 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed.	
3.7 Toxicity by Ingestion: Currently not available 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: Currently not available	
3.10 Vapor (Gas) Irritancy Characteristics: Currently not available 3.11 Liquid or Solid Characteristics: Currently not available 3.12 Odor Threshold: Currently not available 3.13 IDLH Value: Not listed.	
3.14 OSHA PEL-TWA: Not listed. 3.15 OSHA PEL-STEL: Not listed. 3.16 OSHA PEL-Ceiling: Not listed. 3.17 EPA AEGL: Not listed	

4. FIRE HAZARDS	7. SHIPPING INFORMATION
4.1 Flash Point: Not pertinent	7.1 Grades of Purity: Commercial; Pure
4.2 Flammable Limits in Air: Not pertinent	7.2 Storage Temperature: Ambient
4.3 Fire Extinguishing Agents: Flood with water from a protected area.	7.3 Inert Atmosphere: No requirement
4.4 Fire Extinguishing Agents Not to Be Used: A small amount of water may cause explosions.	7.4 Venting: Pressure-vacuum
4.5 Special Hazards of Combustion Products: Currently not available	7.5 IMO Pollution Category: Currently not available
4.6 Behavior in Fire: Increases intensity of fire and can start fires when in contact with organic combustibles	7.6 Ship Type: Currently not available
4.7 Auto Ignition Temperature: Not pertinent	7.7 Barge Hull Type: Currently not available
4.8 Electrical Hazards: Not pertinent	
4.9 Burning Rate: Not pertinent	
4.10 Adiabatic Flame Temperature: Currently not available	
4.11 Stoichiometric Air to Fuel Ratio: Not pertinent	
4.12 Flame Temperature: Currently not available	
4.13 Combustion Molar Ratio (Reactant to Product): Not pertinent.	
4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed	
8. HAZARD CLASSIFICATIONS	
8.1 49 CFR Category: Oxidizer	
8.2 49 CFR Class: 5.1	
8.3 49 CFR Package Group: I	
8.4 Marine Pollutant: No	
8.5 NFPA Hazard Classification:	
Category	Classification
Health Hazard (Blue).....	3
Flammability (Red).....	0
Instability (Yellow).....	2
Special (White).....	OX
8.6 EPA Reportable Quantity: Not listed.	
8.7 EPA Pollution Category: Not listed.	
8.8 RCRA Waste Number: Not listed	
8.9 EPA FWPCA List: Not listed	
9. PHYSICAL & CHEMICAL PROPERTIES	
9.1 Physical State at 15° C and 1 atm: Solid	
9.2 Molecular Weight: 110	
9.3 Boiling Point at 1 atm: Not pertinent (decomposes)	
9.4 Freezing Point: 914°F = 490°C = 763°K	
9.5 Critical Temperature: Not pertinent	
9.6 Critical Pressure: Not pertinent	
9.7 Specific Gravity: >1 at 20°C (solid)	
9.8 Liquid Surface Tension: Not pertinent	
9.9 Liquid Water Interfacial Tension: Not pertinent	
9.10 Vapor (Gas) Specific Gravity: Not pertinent	
9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent	
9.12 Latent Heat of Vaporization: Not pertinent	
9.13 Heat of Combustion: Not pertinent	
9.14 Heat of Decomposition: Not pertinent	
9.15 Heat of Solution: Currently not available	
9.16 Heat of Polymerization: Not pertinent	
9.17 Heat of Fusion: 55.3 cal/g	
9.18 Limiting Value: Currently not available	
9.19 Reid Vapor Pressure: Currently not available	
6. WATER POLLUTION	
6.1 Aquatic Toxicity: 80 ppm/24 hr/mosquitofish/TL <sub>50</sub> /fresh water	
6.2 Waterfowl Toxicity: Currently not available	
6.3 Biological Oxygen Demand (BOD): None	
6.4 Food Chain Concentration Potential: None	
6.5 GESAMP Hazard Profile: Not listed	

NOTES

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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