SAFETY DATA SHEET

SECTION 1 MATERIAL NAME / IDENTIFIER

OXY OUT **WHMIS:** E

Manufacturer's Name: **CAPO INDUSTRIES LTD**
Street Address: **1200 CORPORATE DRIVE**
City: **BURLINGTON, ONTARIO**
Postal Code: **L7L 5R6**

Emergency Telephone: **Canutec (613) 996-6666 (Collect)**

Chemical Name: Oxone

Chemical Family: Monopersulphate

Chemical Formula: $2KHSO_5$ $KHSO_4$ K_2SO_4

Trade Name & Synonyms: Potassium Monopersulphate

Molecular Weight: Not Applicable

Material Use: Pool Water Treatment Chemical

SECTION 2 HAZARDS IDENTIFICATION

GHS classification: Acute toxicity, Oral, Category 4
Skin corrosion/irritation, Category 1B
Serious eye damage/eye irritation, Category 1

Symbol(s)

Signal Word Danger

Hazard statements: H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

Precautionary statements: P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

Ingredient	CAS#	% Concentration
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	70693-62-8	60 - 100
Dipotassium peroxodisulphate	7727-21-1	1 - 5
Tetra(carbonato(2-))dihydroxypentamagnesium	7760-50-1	0.5 – 1.5

SECTION 4 FIRST AID MEASURES

Inhalation: Remove person to fresh air. Give artificial respiration if required. Seek medical attention.
Skin Contact: Wash thoroughly with soap and water. Flush with water for 15 minutes.
Eye Contact: Flush eyes with plenty of water for 15 minutes. Seek medical attention
Ingestion: Do not induce vomiting. Drink large quantities of water and contact a physician.
Note to physicians: None

SECTION 5 FIRE – FIGHTING MEASURES

Hazardous Combustion Products: Oxygen, Sulphur dioxide, and Sulphur trioxide.
Unusual Fire or Explosion Hazards: None
Sensitivity to Mechanical Impact: None
Rate of Burning: None
Explosive Power: None
Sensitivity to Static Discharge: None

Fire Extinguishing Media: Use media suitable to extinguish source of fire.

Instructions to the Fire Fighters: Wear self-contained breathing apparatus and protective suit.

Fire Fighting Protective Equipment: See above

SECTION 6 ACCIDENTAL RELEASE MEASURES

Leak And Spill Procedure: Sweep up and collect in a metal container. Flush residue with water. Large quantities should be neutralized with soda ash.

SECTION 7 HANDLING AND STORAGE

HANDLING

Handling Practices: Avoid contact with eyes, skin and clothing. Avoid breathing dust. Wash thoroughly after handling.

Ventilation Requirements: Use in a well ventilated area.

Other Precautions: Keep away from heat and flame.

STORAGE

Ventilation Requirements: Store in a cool, dry area.

Storage Requirements: Do not mix directly with other chemicals. Do not store with combustible materials. Never allow product to get in contact with water during storage.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Engineering Controls: Local exhaust ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Skin (Specify): Latex or rubber gloves if skin contact is likely.

Eye (Specify): Safety glasses/goggles if eye contact is likely.

Respiratory (Specify): NIOSH/MSHA air purifying respirator if prolonged use in non-ventilated area is Unavoidable.

Other (Specify): Impervious clothing is contact is likely. Eye wash stations are close to product use.

SAFETY DATA SHEET

SECTION 9 PHYSICAL DATA FOR MATERIAL

Physical State:	**Gas**		**Liquid**	**Solid**	**X**
Odour & Appearance:	White granular, opaque, odourless				
Odour Threshold (ppm):	Not applicable				
Flammability:		**Yes**	**No**	**X**	
If Yes, Under Which Conditions?:					
Auto Ignition Temperature (Celsius):	Not applicable				
Upper Explosion Limit (% By Volume):	Not applicable				
Lower Explosion Limit (% By Volume):	Not applicable				
Decomposition Temp (°C)	Not applicable				
Specific Gravity:	1.532				
Viscosity:	Not applicable				
Vapour Pressure (mm):	Not applicable				
Vapour Density (Air-1):	Not applicable				
Flashpoint (°C)	Not applicable				
Evaporation Rate	Not applicable				
Boiling Point (°C):	Not applicable				
Freezing Point (°C):	Decomposes				
Solubility In Water (20°C):	25.6% @ 20°C				
% Volatile (By Weight)	Not applicable				
PH:	2.8 – 4.0 (1% solution)				
Coefficient Of Water/Oil Distribution:	Not applicable				

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability:	**Yes**	**X**	**No**
If No, Under Which Conditions?:			
Incompatibility To Other Substances:	**Yes**	**X**	**No**
If So, Which Ones:	This product is an oxidizer. When mixed with halides (chlorine, bromine) or compounds containing halides, it will release the respective halogen gas. Examples: Mixture of this product and salt will emit chlorine gas. Mixture with cyanides can release hydrogen cyanide gas. Heavy metal salts such as cobalt, nickel and copper cause the evolution of oxygen.		
Conditions to Avoid:	Avoid extreme heat. Temperature > 50°C (> 122°F)		
Hazardous Decomposition Products:	Oxygen, Sulphur dioxide and Sulphur trioxide.		

SECTION 11 TOXICOLOGICAL INFORMATION

ACUTE HEALTH EFFECTS

Inhalation: May cause irritation of respiratory tract.

Skin Contact: Severe skin irritation and burns.

Eye Contact: Corrosive, may cause permanent eye injury.

Ingestion: Harmful if swallowed.

CHRONIC HEALTH EFFECTS None known

Other Health Effects: None known

LD 50 of Material (Specify Species and Routes)

Pentapotassium bis(peroxymonosulphate) bis(sulphate): 500 mg/kg, Oral (Rat), > 2000 mg/kg, Dermal (Rat).

Dipotassium peroxodisulphate: 1130 mg/kg, Oral (Rat), > 10000 mg/kg, Dermal (Rabbit)

Tetra(carbonato(2-))dihydroxypentamagnesium: >2000 mg/kg, Oral (Rat).

LC 50 of Material (Specify Species and Routes)

Pentapotassium bis(peroxymonosulphate) bis(sulphate): > 5 mg/l, Inhalation 4h (Rat)

Dipotassium peroxodisulphate: >10.7 mg/l, Inhalation 4h (Rat)

Exposure (Limits): Pentapotassium bis(peroxymonosulphate) bis(sulphate): No data available

Dipotassium peroxodisulphate: TLV (ACGIH) 0.1mg/m3, TWA as persulfate

Irritancy of Material Skin, eye, nose and throat.

Sensitization of Material None known

Synergistic Materials None known

Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity: None known

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity:

AQUATIC TOXICITY

Pentapotassium bis(peroxymonosulphate) bis(sulphate):

Cyprinodon variegatus (sheepshead minnow) 1.09 mg/l: 96 h LC50

Selenastrum capricornutum (green algae) > 1 mg/l: 96 h ErC50

Selenastrum capricornutum (green algae) 0.5 mg/l: 72 h NOEC

Daphnia 3.5 mg/l: 48 h EC50

Cyprinodon variegatus (sheepshead minnow) 0.222 mg/l: 37 d NOEC

Americamysis bahia (mysid shrimp) 0.267 mg/l: 28 d NOEC

Dipotassium peroxodisulphate:

Oncorhynchus mykiss (rainbow trout) 76.3 mg/l: 96 h LC50

Pseudokirchneriella subcapitata (green algae) 83.7 mg/l: 72 h EbC50

Pseudokirchneriella subcapitata (green algae) 39.2 mg/l: 72 h NOEC

Daphnia magna (water flea) 120 mg/l: 48 h EC50

ENVIRONMENTAL FATE

Pentapotassium bis(peroxymonosulphate) bis(sulphate):

Biodegradability: Readily biodegradable.

Bioaccumulation: Not applicable

Mobility in Soil: Not applicable

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose material in accordance with federal, provincial and local government regulations.

Safe Handling of Residues: Flush residue with water.

Disposal of Packaging: Dispose packaging in accordance with federal, provincial and local government regulations.

SECTION 14 TRANSPORTATION INFORMATION

CANADIAN TDG ACT SHIPPING DESCRIPTION:

Proper shipping name: Corrosive Solid Acidic – Inorganic N.O.S. (Monopersulphate Compound)

Class: 8

Packing group: II

UN number: 3260

Limited Quantity is 1kg and under.

US DOT CLASSIFICATION (49CFR 172.101, 172.102)

Proper shipping name: Corrosive Solid Acidic – Inorganic N.O.S. (Monopersulphate Compound)

Class: 8

Packing group: II

UN number: 3260

IATA_C

Proper shipping name: Corrosive Solid Acidic – Inorganic N.O.S. (Monopersulphate Compound)

Class: 8

Packing group: II
UN number: 3260

IMDG

Proper shipping name: Corrosive Solid Acidic – Inorganic N.O.S. (Monopersulphate Compound)
Class: 8
Packing group: II
UN number: 3260

SECTION 15 REGULATORY INFORMATION

CANADA

WHMIS: E

USA

TSCA: On the inventory, or in compliance with the inventory.

SARA 313 Regulated Chemicals: Sara 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

California Prop. 65: Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known.

NJ Right to Know Regulated Chemical(s): Substances on the New Jersey Workplace Hazardous Substances List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): Dipotassium peroxodisulphate.

PA Right to Know Regulated Chemical(s): Substances on the Pennsylvania Hazardous Substances List present at a Concentration of 1% or more (0.01% for Special Hazardous Substances): Dipotassium peroxodisulphate.

SAFETY DATA SHEET

SECTION 16 OTHER INFORMATION

Prepared By (Group, Department, Etc.): **Quality Control** **Telephone:** **(905) 332-6626**

Preparation Date: **January 1, 1996**
Date Revised: **December 1, 2016**
Additional Notes Or References:

While Capo Industries Ltd. believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of the tests conducted, the data are not to be taken as a warranty or representation for which Capo Industries Ltd. assumes legal responsibility. They are offered solely for your consideration and verification. Any use of this data and information must be determined by the user to be in accordance with applicable Federal, Provincial and local laws and regulations.