

MATERIAL SAFETY DATA SHEET

SECTION 1 MATERIAL NAME / IDENTIFIER

Eclipse3 Emerge

WHMIS: D2B, 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: 2KHSO₅ KHSO₄ K₂SO₄
Trade Name & Synonyms: Potassium Monopersulphate
Molecular Weight: Not Applicable
Material Use: Pool Water Treatment Chemical

SECTION 2 HAZARDS IDENTIFICATION

GHS classification: H314, Skin corrosion/irritation, Category 1B
H318, Serious eye damage/eye irritation, Category 1
H335, Specific target organ toxicity, single exposure, respiratory tract irritation, Cat. 3
H402, Harmful to aquatic life, Category 3

Symbol(s)



Signal Word Danger

Hazard statements: Causes severe skin burns and eye damage. May cause respiratory irritation, and harmful to aquatic Life.

Precautionary statements: Wear gloves and safety glasses when handling material. Wash hands thoroughly after using. Do not get in eyes. Use in well ventilated area. Do not dispose into aquatic life.

HMIS: 3 Health, 0 Fire, 1 Reactivity

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SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

Ingredient	CAS#	% Concentration
Pentapotassium bis(peroxymonosulphate)		
bis(sulphate)	70693-62-8	86 - 96
Dipotassium peroxodisulphate	7727-21-1	0 - 5
Tetra (carbonato (2-)) dihydroxypentamagnesium	7760-50-1	1 - 2

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: 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

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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.

SECTION 9 PHYSICAL DATA FOR MATERIAL

Physical State:	Gas	Liquid	Solid	<u>X</u>
Odour & Appearance:	White granular, opaque, odourless			
Odour Threshold (ppm):	Not applicable			
Flammability:	Yes	No	<u>X</u>	
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:	1.1 – 1.4			
Viscosity:	Not applicable			
Vapour Pressure (mm):	Not applicable			
Vapour Density (Air-1):	Not applicable			

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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:	2.30 (1% solution)
Coefficient Of Water/Oil Distribution:	Not applicable

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Yes No

If No, Under Which Conditions?:

Incompatibility To Other Substances: Yes 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: Will cause irritation of mucosal membrane and respiratory passages.

Skin Contact: Severe skin irritation and burns.

Eye Contact: Corrosive, may cause permanent eye injury.

Ingestion: Prolonged contact may cause gastritis. Gastritis possibility progressing to necrosis or hemorrhage.

CHRONIC HEALTH EFFECTS None known

Other Health Effects: None known

LD 50 of Material (Specify Species and Routes)

Pentapotassium bis(peroxymonosulphate) bis(sulphate): Oral Rat – 500 mg/kg,

Dermal Rat - > 2000 mg/kg.

Dipotassium peroxodisulphate: Oral Rat – 1130 mg/kg.

Dermal Rabbit - > 10000 mg/kg

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LC 50 of Material (Specify Species and Routes) 4 h inhalation Rat - > 5 mg/kg

Exposure (Limits): OSHA PEL particulates not otherwise classified: 15 mg/m³, 8 h, TWA total dust
5 mg/m³, 8 h, TWA respirable dust.

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: 72 h ErC50

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

Daphnia 3.5 mg/l: 48 h EC50

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

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

Dipotassium peroxodisulphate: Information given is based on data obtained from similar substances.

Oncorhynchus mykiss (rainbow trout) 76.3 mg/l US EPA Test Guideline OPP 72-1: 96 h LC50

Pseudokirchneriella subcapitata (green algae) 83.7 mg/l OECD Test Guideline 201: 72 h EbC50

Pseudokirchneriella subcapitata (green algae) 39.2 mg/l OECD Test Guideline 201: 72 h NOEC

Daphnia magna (water flea) 120 mg/l US EPA Test Guideline OPP 72-2: 48 h EC50

ENVIRONMENTAL FATE

Pentapotassium bis(peroxymonosulphate) bis(sulphate):

Biodegradability: Readily biodegradable.

Bioaccumulation: Bioaccumulation is unlikely.

Mobility in Soil: Not applicable

Dipotassium peroxodisulphate:

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

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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: D2B, E

USA

