



SAFETY DATA SHEET

PRODUCT NAME: POTASSIUM PEROXYMONOSULPHATE

Issue Date: May 23

IDENTIFICATION

Product Name: Potassium Peroxymonosulphate
Other Names: MPS, KMPS, potassium monopersulfate, potassium caroate, Caroat, Oxone
Product Code: ZPPEROX
Uses: Manufacture of dry laundry bleaches, detergent bleach washing compound, scouring powders, plastic dishware cleaners, metal cleaners, hair-wave neutralizers, pharmaceuticals, general oxidizing reactions.
Supplier: HamChem Hamilton Chemicals Ltd, 75 Ruffell Rd, Hamilton
Phone: 079744971 Email: sales@hamchem.nz Web: www.hamchem.nz

- In emergency dial 111, and then ask for Fire, Ambulance or Police as necessary.
- In case of poisoning phone National Poisons Centre – 0800 764 766

HAZARD IDENTIFICATION



GHS Classifications

Oxidising Solids – Category 3
Skin Corrosion – Category 1C
Serious Eye Damage – Category 1

Signal Word: Danger

Hazard Statements

H272 May intensify fire, oxidizer
H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking
P220 Keep away from clothing and other combustible materials
P280 Wear protective gloves/clothing and eye/face protection
P260 Do not breathe dusts or mists
P264 Wash hands thoroughly after handling

Response

P370 + P378 In case of fire: Use carbon dioxide or dry chemical to extinguish
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).
P363 Wash contaminated clothing before reuse
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310 Immediately call a POISON CENTRE or Doctor
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so.
P310 Immediately contact a POISON CENTRE or Doctor

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HamChem Ltd, 75 Ruffell Road, Hamilton, New Zealand. Phone: 07-974-4971 Email: info@hamchem.nz Web: www.hamchem.nz

PRODUCT NAME: POTASSIUM PEROXYMONOSULPHATE**Storage**

P405 Store locked up

Disposal

P501 Dispose of contents/container to an approved waste facility in accordance with local regulations

COMPOSITION & INFORMATION ON INGREDIENTS**Chemical Entity**

Potassium Peroxymonosulphate

CAS No.

70693-62-8

Proportion (%)

≥99% - ≤100%

FIRST AID MEASURES**National Poisons Centre – 0800 POISON (0800 764 766)**

If swallowed: Keep respiratory tract clear. Do NOT induce vomiting. Call a POISON CENTRE or Doctor immediately. Rinse mouth thoroughly with water.

If on skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before re-use. If on skin, rinse well with water. If on clothes, remove clothes. If symptoms persist, call a physician.

If inhaled: Call a physician or poison control centre immediately. If unconscious place in recovery position and seek medical advice. Keep respiratory tract clear. If breathed in, move person into fresh air.

If in eyes: Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

Note to Physician: Treat symptomatically based on judgement of doctor and individual reactions of patient. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended. Symptoms of poisoning may appear several hours later.

FIRE FIGHTING MEASURES

General Measures: Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk.

Flammability Conditions: Product is a non-flammable solid.

Extinguishing Media: In case of fire, appropriate extinguishing media include Carbon dioxide (CO₂) and Dry chemical. Do NOT use high volume water jet. Cool closed containers exposed to fire with water spray.

Fire and Explosion Hazard: Not explosive.

Hazardous Products of Combustion: Non-combustible solid. Avoid generating dust. Incompatible with accelerators, strong acids and bases, heavy metal salts, reduction mediums, impurities (rust, dust, ash), and sources of ignition. Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.

Special Fire Fighting Instructions: Do not use a solid water stream as it may scatter and spread fire. Remove undamaged containers from fire area if it is safe to do so. Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Personal Protective Equipment: Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves) or chemical splash suit. Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low

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areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk. Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.

ACCIDENTAL RELEASE MEASURES

General Response Procedure: Personnel involved in the clean up should wear full protective clothing as listed in section 8. Avoid accidents, clean up immediately. Evacuate all unnecessary personnel. Increase ventilation. Avoid walking through spilled product as it is slippery when spilt. Stop leak if safe to do so. Isolate the danger area. Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management. Use clean, non-sparking tools and equipment. Shut off all possible sources of ignition.

Clean Up Procedures: Contain and sweep/shovel up spills with inert absorbent material or use an industrial vacuum cleaner. Transfer to suitable, labelled, corrosion-resistant containers and dispose of promptly as hazardous waste. Wash small residues with plenty of water. Never add other substances or waste material to product residue. Move product residue to a safe place and dispose of properly.

Containment: Stop leak if safe to do so. Isolate the danger area.

Decontamination: To clean the floor and all objects contaminated by this material, use plenty of water.

Environmental Precautionary Measures: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Evacuation Criteria: Evacuate all unnecessary personnel.

Personal Precautionary Measures: Personnel involved in the clean up should wear full protective clothing as listed in section 8.

HANDLING & STORAGE

Handling: Ensure an eye bath and safety shower are available and ready for use. Do not swallow. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product vapours. Avoid prolonged or repeated exposure. Product is hygroscopic. Never pour product residue back into storage container. Risk of decomposition. Keep away from combustible materials. Avoid dust formation. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed. No Smoking. Avoid impurities (e.g. rust, dust, ash), risk of decomposition. Protect from moisture. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs.

Storage: Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Avoid impurities (e.g. rust, dust, ash), risk of decomposition. Protect from moisture. Store apart from other dangerous and incompatible substances.

Container: Container type/packaging must comply with all applicable local legislation. Store in original packaging as approved by manufacturer.

EXPOSURE CONTROLS & PERSONAL PROTECTION

General:

Workers, Inhalation, Long-term systemic effects, 0.28 mg/m³

Workers, Inhalation, Acute systemic effects, 50 mg/m³

Workers, Inhalation, Long-term local effects 0.28 mg/m³

Workers, Inhalation, Acute local effects, 50 mg/m³

Workers, Skin contact, Long-term systemic effects, 20 mg/kg bw/day

Workers, Skin contact, Acute systemic effects, 80 mg/kg bw/day

Workers, Skin contact, Acute local effects, 0.449 mg/cm²

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Exposure Limits: No Data Available

Biological Limits: No information available on biological limit values for this product.

Engineering Measures: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

Personal Protection Equipment

RESPIRATOR: Wear Respirator with filter type ABEK (AS1715/1716).

EYES: Tightly fitting safety goggles/Face protection (AS1336/1337).

HANDS: Butyl rubber gloves (0.5mm/>=8hr break through time) (AS2161).

CLOTHING: Protective suit (AS3765/2210).

Remove and wash contaminated clothing before re-use.

Work Hygienic Practices: Keep away from food and drink. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.

PHYSICAL & CHEMICAL PROPERTIES

Physical State:	Solid
Appearance:	Solid
Odour:	Odourless
Colour:	White
pH:	2.3 10g/l
Vapour Pressure:	< 0.0000017 hPa torr (@ 25 °C)
Relative Vapour Density:	No Data Available
Boiling Point:	No Data Available
Melting Point:	Decomposes
Freezing Point:	Decomposes °C
Solubility:	ca. 300 g/l - soluble 20°C
Specific Gravity:	No Data Available
Flash Point:	No Data Available
Auto Ignition Temp:	No Data Available
Evaporation Rate:	No Data Available
Bulk Density:	1.100 kg/m3
Corrosion Rate:	No Data Available
Decomposition Temperature:	>80 °C
Density:	1.1 g/cm3
Specific Heat:	No Data Available
Molecular Weight:	No Data Available
Net Propellant Weight:	No Data Available
Octanol Water Coefficient:	log Pow: <0.3 (20°C)
Particle Size:	No Data Available
Partition Coefficient:	No Data Available
Saturated Vapour Concentration:	No Data Available
Vapour Temperature:	No Data Available
Viscosity:	No Data Available
Volatile Percent:	No Data Available
VOC Volume:	No Data Available
Additional Characteristics:	No Data Available
Potential for Dust Explosion:	No Data Available
Fast or Intensely Burning Characteristics:	No Data Available
Flame Propagation or Burning Rate of Solid Materials:	No Data Available
Non-Flammables That Could Contribute Unusual Hazards to a Fire:	No Data Available
Properties That May Initiate or Contribute to Fire Intensity:	No Data Available
Reactions That Release Gases or Vapours:	No Data Available
Release of Invisible Flammable Vapours and Gases:	No Data Available

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STABILITY & REACTIVITY

Chemical Stability: Product is stable under normal conditions of use, storage and temperature. Corrosive Solid. Hygroscopic.

Conditions to Avoid Avoid: excessive heat, elevated temperatures, sunlight, flame, sources of ignition and shock, dust generation, moisture/high humidity, and incompatible materials. Dust may form explosive mixture in air.

Materials to Avoid: Incompatible with accelerators, strong acids and bases, heavy metal salts, reduction mediums, impurities (rust, dust, ash), and sources of ignition. Keep away from heat and sources of ignition. Protect from moisture.

Hazardous Decomposition Products: Irritant, caustic, flammable, noxious/toxic gases and vapours can develop in the case of fire and decomposition.

Hazardous Polymerisation: Hazardous reactions: Even small amounts of moisture or impurities can noticeably reduce SADT.

TOXICOLOGICAL INFORMATION

General Information:

Genotoxicity in vitro, Method: OECD Test Guideline 473, Result: positive

Genotoxicity in vivo, Species: Mouse, Application Route: Ingestion, Method: OECD Test Guideline 474, Result: negative.

Effects on foetal development: Species: Rat, Application Route: oral (gavage), General Toxicity Maternal: No observed adverse effect level: 250 mg/kg body weight.

Teratogenicity: No observed adverse effect level: \geq 750 mg/kg body weight, Method: OECD Test Guideline 414

Species: Rat, Application Route: oral (gavage)

General Toxicity Maternal: Lowest observed adverse effect level: 750 mg/kg body weight

Teratogenicity: Lowest observed adverse effect level: $>$ 750 mg/kg body weight

Method: OECD Test Guideline 414

Species: Rabbit

Method: OECD Test Guideline 404

Result: Corrosive

Species: Rabbit

Method: OECD Test Guideline 405

Result: Eye irritation

Exposure routes: Skin contact

Species: Guinea pig

Method: OECD Test Guideline 406

Result: Does not cause skin sensitisation.

Species: Rat

NOAEL: 200 mg/kg

LOAEL: 600 mg/kg

Application Route: Ingestion

Exposure time: 90 d

Method: OECD Test Guideline 408

Species: Rat

LOAEL: 2.73 mg/kg

Application Route: inhalation (dust/mist/fume)

Exposure time: 14 d

Method: OECD Test Guideline 412

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Eye Irritant: Causes serious eye damage. May cause irreversible eye damage.

Ingestion: Harmful if swallowed. Extremely corrosive and destructive to tissue.

Inhalation: Call a physician or poison control centre immediately. If unconscious place in recovery position and seek medical advice. Keep respiratory tract clear. If breathed in, move person into fresh air.

Skin Irritant: Causes burns. Extremely corrosive and destructive to tissue.

Carcinogen Category: No Data Available

ECOLOGICAL INFORMATION

Ecotoxicity

Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 53 mg/l, Exposure time: 96 h

Method: OECD Test Guideline 203.

NOEC (Oncorhynchus mykiss (rainbow trout)): 27 mg/l, Exposure time: 96 h, Method: OECD Test Guideline 203

Toxicity to algae: ErC50 (Pseudokirchneriella subcapitata (green algae)): > 1mg/l, Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to bacteria: EC50 (Bacteria): 100 mg/l, Exposure time: 3 h, Method: OECD Test Guideline 209

Toxicity to fish (Chronic toxicity): NOEC: 0.444 mg/l, Exposure time: 37 d, Species: Cyprinodon variegatus (sheepshead minnow)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity); NOEC: 0.267 mg/l, Exposure time: 96 h

This product has no known ecotoxicological effects.

Harmful to aquatic life with long lasting effects.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

Persistence/Degradability: This substance/mixture contains no components considered to be either persistent, bioaccumulative or toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Mobility: No information available on mobility for this product.

Environmental Fate: Do NOT let product reach waterways, drains and sewers.

Harmful to aquatic organisms.

Bioaccumulation Potential: No information available on bioaccumulation for this product.

Environmental Impact: No Data Available

DISPOSAL CONSIDERATIONS

General Information: Dispose of in accordance with all local, state and federal regulations.

All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.

Special Precautions for Land Fill: Contact a specialist disposal company or the local waste regulator for advice.

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TRANSPORT INFORMATION

UN Number: 3260
Proper Shipping name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (POTASSIUM PEROXOMONOSULPHATE)
Dangerous Goods Class: 8
Packing group: II
Hazchem Code: 2X

REGULATORY INFORMATION

HSNO Classifications: 5.1.1C, 8.2C, 8.3A
EPA approval code: HSR002532 – Oxidising Liquids and Solids (Corrosive) Group Standard 2020

OTHER INFORMATION

End of SDS.