

Safety Data Sheet: Potassium Monopersulfate Compound

1. Identification

Product	Potassium Monopersulfate Compound; CAS 70693-62-8; EC 274-778-7
Use	Industrial oxidation and chemical-formulation development.
Company	Hainan Zhongxin Chemical Co., Ltd. (ZXCHEM)
Address	Room 1001, Building A, Caohejing Center, No. 1520 Gumei Road, Xuhui District, Shanghai, China
Telephone / email	+86-21-54265599 / sales@zxchem.com.cn
Emergency contact	ZXCHEM office number above, office hours, China time (UTC+8). For urgent medical assistance contact local emergency services.
Scope	Reference safety information for Potassium Monopersulfate Compound. The reference composition, concentration and supply-grade differences are described in Section 3. This document does not certify the composition or transport status of a specific delivered batch or a different formulation.

2. Hazards Identification

Classification	Acute oral toxicity Category 4; skin corrosion Category 1B; serious eye damage Category 1; chronic aquatic hazard Category 2.
Signal word / symbols	Danger; GHS05, GHS07, GHS09
Hazard statements	H302: harmful if swallowed. H314: severe skin and eye burns. H318: serious eye damage. H411: toxic to aquatic organisms with persistent effects.
Prevention	Use adequate ventilation; avoid inhaling dust. Prevent skin and eye contact. Wear suitable chemical-resistant gloves and eye protection. Wash after handling; keep food and drink out of the work area.
Response	After exposure, stop work and seek medical advice. For severe exposure obtain urgent medical care. Rinse contaminated skin or eyes with water; move an inhalation casualty to fresh air.
Environment	Prevent uncontrolled release to drains, soil or surface water. Collect spills for appropriate disposal.



3. Composition / Information on Ingredients

Reference ingredient	Potassium peroxymonosulfate triple salt, CAS 70693-62-8, substance reference up to 100%. KHSO5 activity is the supply specification and is not a separate added ingredient percentage.
Supply grade	KHSO5 ≥42.8% / active oxygen ≥4.5%
Applicability	The cited concentration or purity describes the reference material. It is not a certificate of analysis for the delivered batch; different solvents or dilutions require the matching supplier safety document.

4. First-Aid Measures

General	Protect the rescuer from exposure and show the product information to medical personnel. Obtain medical advice if symptoms occur or exposure is significant.
Inhalation	Move to fresh air and keep the person comfortable. Seek medical care for breathing difficulty or persistent symptoms. Avoid exposing rescuers to dust.
Skin	Remove contaminated clothing and rinse skin thoroughly with water. Obtain urgent treatment for chemical burns.
Eyes	Rinse gently with clean water for at least 15 minutes. Remove contact lenses when easy and continue rinsing. Obtain urgent medical care.
Ingestion	Rinse the mouth. Do not induce vomiting. Give nothing by mouth to an unconscious person. Obtain emergency medical attention.
Effects / treatment	Acidic solid can severely burn skin and eyes and is harmful if swallowed. Avoid inhalation of dust. Treatment is symptomatic and directed by a clinician.

5. Fire-Fighting Measures

Extinguishing media	Use water spray, foam, dry chemical or carbon dioxide suited to the surrounding fire.
Hazards	Heat can cause decomposition and release irritating sulfur-containing gases; keep away from excessive heat and contamination.
Protection	Firefighters require suitable protective clothing and self-contained breathing equipment. Prevent contaminated firefighting water entering drains.

6. Accidental Release Measures

Personnel	Isolate the spill and provide ventilation. Use chemical-resistant gloves and eye protection; avoid contact and dust exposure.
Environment	Contain the release and protect drains and waterways. Report significant environmental contamination to the responsible authority.
Cleanup	Collect spilled solid without raising dust into closed labelled containers.

7. Handling and Storage

Handling	Use controlled transfer and effective ventilation. Avoid generating dust and prevent contamination of the work area.
Storage	Keep tightly closed and dry in a cool, ventilated area. Separate from combustible materials, strong alkalis and other incompatible chemicals. Protect from heat and contamination.
Incompatibilities	Alkalis, combustible material, reducing agents and incompatible contaminants.
Specific use	Evaluate compatibility and appropriate operating conditions in the complete formulation before industrial use.

8. Exposure Controls / Personal Protection

Exposure limits	The reference does not establish a product-specific exposure limit. Apply local workplace exposure requirements and control dust or mist.
Engineering controls	Use local extraction where dust can be generated. Maintain accessible eyewash and emergency washing facilities.
Personal protection	Wear chemical-resistant gloves selected for the task, suitable protective clothing and splash goggles. Add face protection for splash-prone tasks.
Respiratory protection	Use a properly selected respirator under a respiratory-protection program where engineering controls do not adequately limit airborne exposure.
Hygiene	Wash after handling, remove contaminated clothing promptly and do not eat, drink or smoke in the work area.

9. Physical and Chemical Properties

Appearance	White powder or granules
Formula / molecular weight	2KHSO ₅ ·KHSO ₄ ·K ₂ SO ₄ / 614.76 g/mol (triple salt)
Triple-salt formula	H ₃ K ₅ O ₁₈ S ₄
Decomposition, reference	Approximately 90°C
Water solubility, reference	250–300 g/L at 22°C
Solution pH, reference	2–3 at 10 g/L and 20°C
Other properties	Product-specific values for odor threshold, vapor pressure, partition coefficient, autoignition temperature and viscosity are not supplied by the selected reference set. No values are inferred.

10. Stability and Reactivity

Stability	Handle and store under the recommended conditions. Prevent contamination and unnecessary heating.
Incompatibilities	Alkalis, combustible material, reducing agents and incompatible contaminants.
Decomposition	Heat can cause decomposition and release irritating sulfur-containing gases; keep away from excessive heat and contamination.

11. Toxicological Information

Exposure effects	Acidic solid can severely burn skin and eyes and is harmful if swallowed. Avoid inhalation of dust.
Reference classification	Acute oral toxicity Category 4; skin corrosion Category 1B; serious eye damage Category 1; chronic aquatic hazard Category 2.
Toxicological data	Reference oral rat LD ₅₀ 500 mg/kg, dermal LD ₅₀ >2,000 mg/kg; inhalation dust/mist LC ₅₀ 1.85 mg/L at 4 h is reported with inconclusive classification data. Do not derive a new inhalation category from one value.

12. Ecological Information

Environmental effects	Reference fish LC ₅₀ 53 mg/L at 96 h; algae NOEC 0.5 mg/L at 72 h. Chronic fish NOEC 0.222 mg/L at 37 days. Prevent environmental release.
Controls	Prevent uncontrolled release, collect spills and dispose of contaminated material through an authorized route.
Assessment	No product-specific PBT/vPvB assessment is claimed. Absence of data does not establish absence of environmental effects.

13. Disposal Considerations

Product	Collect surplus product and contaminated cleanup material for disposal by an authorized chemical-waste contractor in accordance with local requirements.
Packaging	Containers may retain product residues. Do not reuse contaminated packaging without an approved cleaning process; use an authorized disposal route.

14. Transport Information

Classification	Class 8 — Corrosive
UN number	UN 3260
Shipping name	Corrosive solid, acidic, inorganic, n.o.s. (potassium peroxymonosulfate triple salt)
Class / packing group	ADR / IMDG / IATA: Class 8, packing group II. IMDG marine pollutant: yes; the reference air entry does not mark an environmental hazard.
Transport precautions	Protect packaging and closures from damage, secure loads and prevent releases. This reference is not a shipping declaration for a specific consignment.

15. Regulatory Information

Identity	Potassium Monopersulfate Compound; CAS 70693-62-8; EC 274-778-7
HS reference	283340; reference heading rather than a destination customs ruling.
Compliance	Apply applicable workplace, environmental and transport rules. A raw-material listing does not establish authorization for a finished disinfectant or biocidal product.
Assessment	No ZXCHEM-specific chemical safety assessment or destination registration is asserted.

16. Other Information

Hazard meanings	H302: harmful if swallowed. H314: severe skin and eye burns. H318: serious eye damage. H411: toxic to aquatic organisms with persistent effects.
Limitations	Prepared as reference safety information for the identified material. It is not a batch analytical certificate or safety assessment of a different solvent-containing formulation.
Revision	2026.2; prepared 2026-10-06. Customer-document branding and title corrected; technical safety data retained.
Document scope	Reference safety information for the material and grade described in Sections 1 and 3. Different concentrations, solvents or formulations require the applicable safety information. This is not a batch analytical certificate.

Revision: 2026.2 | Revision date: 2026-10-06