

Polixetonium Chloride (WSCP) 60%

1. Identification

Product	Polixetonium Chloride (WSCP) 60%
CAS / EC	31512-74-0 / Not assigned in the matched mixture reference
Use	Cationic polymer concentrate for professionally assessed industrial microbial-control formulations.
Uses advised against	Unassessed consumer, medical or other applications outside the qualified grade and intended use.
Supplier	Hainan Zhongxin Chemical Co., Ltd. (ZXCHEM)
Address	Room 1001, Building A, Caohejing Center, No. 1520 Gumei Road, Xuhui District, Shanghai, China
Contact	+86-21-54265599 sales@zxchem.com.cn www.zxchem.com
Emergency contact	+86-21-54265599; office hours, China time UTC+8. For an urgent incident, contact local emergency services.
Scope	Reference safety information for Polixetonium Chloride (WSCP) 60%. 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. Hazard identification

Classification	Oral acute toxicity 4; inhalation acute toxicity 4; eye irritation 2B (matched 60% OSHA reference).
Signal word	Warning
Pictograms	GHS07
Hazard statements	H302: Harmful if swallowed. H332: Harmful if inhaled. H320: Causes eye irritation.
Prevention	P264: Wash exposed skin after handling. P280: Wear suitable protective gloves, clothing and eye protection. P260/P271: Avoid inhalation; use adequate ventilation and effective exposure controls. P270: Do not eat, drink or smoke when using this material.
Response	Follow the exposure-specific first-aid measures in Section 4. Remove contaminated clothing. Seek urgent advice for severe symptoms.
Storage / disposal	Keep closed under the conditions in Section 7. Dispose through an authorized waste route under local rules.
Other hazards	Dust, splashes, process conditions and decomposition can create exposure risks not represented by the commercial assay.
Jurisdiction scope	Section 2 uses the matched 60% OSHA reference. Environmental transport hazards are addressed in Section 14; this is not a certified EU CLP assessment of the actual supply mixture.



3. Composition/information on ingredients

Polymer component	CAS 31512-74-0; poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride]
Reference concentration	60% polymeric active component, liquid mixture; other reportable hazardous components are not listed in the matched reference.
Supply specification	Solid content 60%; density at 20°C 1.13–1.16 g/cm³; pH 5.0–7.0.
Composition scope	Reference safety classification and IMDG/IATA transport entries cover 60% poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride], CAS 31512-74-0, as liquid. The supplied TDS lists 60% solid content, density 1.13–1.16 g/cm³ at 20°C and pH 5.0–7.0; it is not a complete composition analysis. The reference has pH 6–8, so it does not certify the actual delivery formulation. No fixed polymer molecular weight is assigned.

4. First-aid measures

Eye contact	Rinse eyes immediately with water for at least 15 minutes; remove contact lenses when easily possible and continue rinsing. Seek medical attention if irritation persists.
Inhalation	Move to fresh air without exposing rescuers. Seek medical attention for persistent or developing symptoms.
Skin contact	Remove contaminated clothing and rinse thoroughly with water. Seek care if irritation or rash develops; wash clothing before reuse.
Ingestion	Rinse the mouth. Do not induce vomiting or give anything by mouth to an unconscious person. Seek medical advice after substantial ingestion or if symptoms occur.
Symptoms	Harmful if swallowed or inhaled; causes eye irritation. Matched 60% reference: oral LD50 1,850 mg/kg, rat; inhalation LC50 2.9 mg/L, dust/mist, rat, 4 h; dermal LD50 >2,000 mg/kg, rabbit. These are reference material or ingredient results, not delivered-batch tests.
Immediate treatment	Treat symptoms. Seek medical advice for persistent effects; protect rescuers against secondary exposure.

5. Fire-fighting measures

Media / specific hazards	Use extinguishing media suitable for the surrounding fire. Heated containers can rupture. Decomposition can release carbon oxides, nitrogen oxides and halogenated compounds. Contain contaminated firewater.
Protection	Use full protective equipment and self-contained breathing apparatus. Fight from a safe position; contain contaminated firewater and cool exposed containers when safe.

6. Accidental release measures

Personal / environmental precautions	Restrict entry, avoid exposure and prevent environmental release. Use the controls and protection in Section 8.
Containment / cleanup	Exclude unprotected personnel, ventilate and contain the liquid. Use a compatible inert, noncombustible absorbent and transfer to labeled waste containers; prevent entry to drains.
References	See Sections 7, 8 and 13 for handling, protection and disposal.

7. Handling and storage

Handling	Avoid contact and inhalation; maintain ventilation and good hygiene. Use suitable equipment and prevent chemical contamination.
Storage	Keep tightly closed and upright in a cool, ventilated area, protected from direct sunlight, heat and incompatible chemicals. Use secondary containment and prevent release to waterways.
Incompatibilities	Stable under recommended storage conditions. Avoid excessive heat and strong oxidizers. Use closed containers and prevent chemical contamination.
Specific end use	Cationic polymer concentrate for professionally assessed industrial microbial-control formulations.

8. Exposure controls/personal protection

Control parameters	No supply-specific occupational exposure limit or DNEL/PNEC is established by this record. Apply local substance and particulate exposure limits where relevant.
Engineering and personal protection	Use closed transfer or local extraction. Provide an eyewash and safety shower. Wear chemical-resistant gloves selected for the actual exposure, protective clothing and splash goggles. For airborne mist or vapor, use a suitable approved respirator selected through a workplace risk assessment; emergency or unknown atmospheres require independent air supply.
Hygiene / environmental control	Wash after handling; separate contaminated clothing. Contain product and process effluent; do not eat or drink in handling areas.

9. Physical and chemical properties

Physical state / appearance	Amber clear liquid
Formula / formula weight	Polymeric material; no single molecular formula or fixed molecular weight is assigned.
Density, 20°C	1.13–1.16 g/cm ³
Odor / odor threshold	No supply-grade value provided.
Boiling / decomposition point	No supply-grade limit provided.
Flammability / flash point	No supply-grade test value provided; see fire and reactivity information in Sections 5 and 10.
Vapor pressure / density	No supply-grade value provided.
Partition coefficient / autoignition	No supply-grade value provided.
Solubility, reference	Readily soluble in cold and hot water.
Flash point, reference	Closed cup >100°C.
Boiling point, reference	>100°C.
Odor, reference	Mild.
Viscosity, reference	125 mPa·s at room temperature; descriptive reference, not a supply limit.

10. Stability and reactivity

Reactivity / stability / reactions	Stable under recommended storage conditions. Avoid excessive heat and strong oxidizers. Use closed containers and prevent chemical contamination.
Conditions and materials to avoid	Follow the incompatible-material and storage requirements in Section 7.
Decomposition products	See Section 5. No normal-storage decomposition is indicated under the recommended conditions.

11. Toxicological information

Routes / effects	Harmful if swallowed or inhaled; causes eye irritation. Matched 60% reference: oral LD50 1,850 mg/kg, rat; inhalation LC50 2.9 mg/L, dust/mist, rat, 4 h; dermal LD50 >2,000 mg/kg, rabbit. These are reference material or ingredient results, not delivered-batch tests.
Other endpoints	Supply-batch sensitization, mutagenicity, carcinogenicity, reproduction and repeated-dose testing has not been provided. This does not override the classifications and target organs listed in Section 2.
Mixture assessment	Reference-substance or component results are not delivered-batch analytical or toxicological results.

12. Ecological information

Aquatic toxicity / behavior	The matched reference identifies a marine pollutant for IMDG transport. Reported marine-water LC50 values: crustaceans 13 mg/L, 96 h; fish >600 mg/L, 96 h. Prevent release; no supply-grade chronic aquatic or degradation assessment is provided.
Other environmental endpoints	Supply-batch PBT/vPvB, endocrine-disruption, persistence, degradation, mobility and bioaccumulation assessments have not been provided. Do not infer absence of effects from missing data.

13. Disposal considerations

Product and residues	Characterize waste under applicable local rules and use a licensed waste contractor. Do not discharge chemical residues or contaminated process water to drains.
Contaminated packaging	Do not reuse contaminated packaging for unrelated purposes. Handle retained material with the same protection as the product and use an authorized disposal or return route.

14. Transport information

IMDG	UN 3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (polixetonium chloride); Class 9; packing group III; marine pollutant.
IATA	UN 3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (polixetonium chloride); Class 9; packing group III; environmentally hazardous.
US DOT, reference	Not regulated in the matched US 60% reference. This entry must not be generalized to IMDG or IATA.
ADR / RID	The matched 60% source does not provide an ADR/RID entry. European substance references list UN 3082, Class 9, PG III without stating the same concentration; obtain the applicable mixture assessment for a road/rail consignment.
Special precautions	Use authorized packaging and trained personnel. Small-package provisions depend on the transport mode and consignment; exemptions are not assumed for drums or IBCs.
Bulk transport	The matched packaged-product reference does not establish maritime bulk authorization.
Scope	These are concentration-specific reference entries, not certification of the actual delivery. Transport status must follow the applicable current formulation assessment and shipment mode.

15. Regulatory information

Classification framework	GHS/CLP reference classification is given for the material in Section 3. Local worker-protection, labeling, transport, environmental and end-use requirements apply.
Registration / use status	No supply-specific registration number, market authorization or end-use certification is established by this reference record.
Chemical safety assessment	No supply-formulation chemical safety assessment is supplied by ZXCHEM in this record.
Use and market restrictions	For permitted industrial use only. Confirm biocide authorization, labeling and discharge requirements for the destination and finished formulation. Do not use in potable-water, contact-lens or consumer applications without specific qualified documentation.

16. Other information

Revision date	2026-10-13; initial ZXCHEM reference safety document, version 2026.1.
Abbreviations	ADR/RID: road/rail dangerous goods; IMDG: maritime dangerous goods; IATA: air dangerous goods; PG: packing group; LD50/LC50: median lethal dose/concentration; STOT: specific target organ toxicity.
Use of information	Use together with the grade TDS and a workplace assessment. Concentration, solvent, impurity or physical-form changes require applicable safety information.
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.

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