

Safety Data Sheet (MSDS)

- Tupinal-SI (=HEDP)

(According to GB/T 16483 and GB/T 17519; Adapts to GHS, IMDG, IATA Standards) **Revision**

Date: 29 FEB 2026

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifiers

- Product Name: Tupinal-SI (=HEDP)
- Synonyms: 1-Hydroxyethylidene-1,1-diphosphonic Acid; HEDP; Hydroxyethylidene Diphosphonic Acid
- Product Number: HEDP-20260229
- Brand: SIGALD
- CAS-No.: 2809-21-4
- Form: Colorless to pale yellow clear aqueous liquid (50% active)
- Grade: Industrial Grade / Cosmetic Grade / Electroplating Grade

1.2 Details of the supplier of the safety data sheet

- Company: NEWAY SINOPHC TECH. LIMITED
- Address: RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE
- Telephone: +86-021-50350029
- Fax: +86-021-50350029

1.3 Emergency telephone

- Emergency Phone #: +86-021-50350029 (24h Chemical Emergency Response) / CHEMTREC: +1-800-424-9300

1.4 Relevant Identified Uses and Uses Advised Against

- **Identified Uses:** Water treatment scale/corrosion inhibitor; electroplating chelating agent; cosmetic sequestering agent; textile dyeing sequestering agent; metal surface treatment agent.
- **Uses Advised Against:** Not for oral consumption; not for medical use; do not use as a food additive; avoid direct contact with food and drinking water; do not mix with strong alkalis in high concentration.

SECTION 2: Hazards Identification

2.1 GHS Classification

- Skin corrosion, Category 1B - H314
- Serious eye damage, Category 1 - H318
- Specific target organ toxicity - single exposure, respiratory tract irritation, Category 3 - H335

2.2 GHS Label Elements

- Hazard Pictogram: (Corrosive)
- Signal Word: **DANGER**
- **Hazard Statements:**
 - H314: Causes severe skin burns and eye damage
 - H318: Causes serious eye damage
 - H335: May cause respiratory tract irritation
- **Precautionary Statements:**
 - P260: Do not breathe mist/vapours/spray
 - P264: Wash hands thoroughly after handling
 - P280: Wear protective gloves/eye protection/face protection/protective clothing
 - 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/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/physician.
 - P363: Wash contaminated clothing before reuse.
 - P405: Store locked up.
 - P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Physical and Chemical Hazards



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Non-flammable, non-explosive; corrosive to metal and concrete; reacts with strong alkalis to produce heat and salt; no polymerization risk under normal conditions.

2.4 Health Hazards

Causes severe chemical burns to skin and serious eye damage; inhalation of mist causes respiratory tract irritation (cough, sore throat, chest tightness); no acute oral toxicity at low dosage, but massive ingestion causes gastrointestinal burns; no chronic toxic effects based on current data.

2.5 Environmental Hazards

Low toxicity to aquatic organisms ($LC_{50} > 1000$ mg/L for fish); biodegradable in natural environment; no bioaccumulation potential; no long-term pollution to water and soil when disposed of properly; corrosive to aquatic organisms at high concentration.

2.6 Other Hazards

No carcinogenic, mutagenic or reproductive toxic effects; no aspiration hazard for liquid form; corrosive to carbon steel, iron and concrete at high concentration.

SECTION 3: Composition/Information on Ingredients

- **Substance / Mixture:** Aqueous mixture of pure HEDP (no hazardous impurities exceeding the limit)
- **Main Components:** | Component | Content (w/w) | CAS-No. | Function | Hazard Classification | |
--|---|---|---| | 1-Hydroxyethylidene-1,1-diphosphonic Acid | 50.0% | 2809-21-4 | Active scale/corrosion inhibitor/chelating agent | Skin Corr. 1B; Eye Dam. 1; STOT-SE 3 | | Deionized Water | 50.0% | 7732-18-5 | Solvent | Non-hazardous |
- **Hazardous Ingredients:** No other hazardous ingredients; the only hazardous component is HEDP (50% active content).

SECTION 4: First Aid Measures

4.1 Description of First-Aid Measures

- **If Inhaled (mist/vapour):** Move the victim to fresh air immediately, keep the respiratory tract unobstructed and at rest. If coughing, chest tightness or difficulty breathing occurs, give oxygen and consult a physician **immediately**; do not use artificial respiration if the victim has inhaled a large amount of mist.
- **In Case of Skin Contact:** Remove all contaminated clothing, gloves and shoes **immediately**; rinse the affected area with **plenty of running water** for 15 ~ 20 minutes (including skin folds and nails). Do not use neutralizing agents on the skin directly; apply a sterile anti-burn ointment if necessary, and seek medical attention for severe burns.
- **In Case of Eye Contact:** Do not rub eyes; pry open the upper and lower eyelids and rinse with **plenty of clean running water** for at least 20 minutes (rinse from inner to outer corner, keep eyes open during rinsing). Remove contact lenses if present and easy to do (do not touch the cornea). Consult an ophthalmologist **immediately** (even if no discomfort is felt).
- **If Swallowed:** Rinse the mouth with plenty of water immediately, **do not induce vomiting** (may cause corrosive damage to the esophagus and respiratory tract). Drink a small amount of milk or egg white to neutralize the acid (do not drink water in large quantities); call a poison control center or physician **immediately** for gastric lavage and treatment.

4.2 Most Important Symptoms and Effects

- **Acute Effects:** Severe skin redness, blistering and chemical burns; irreversible eye damage (corneal burn, vision loss); respiratory tract irritation, cough, sore throat and chest tightness; gastrointestinal burns, abdominal pain, nausea and vomiting (massive ingestion).
- **Delayed Effects:** Skin scarring after severe burns; long-term eye discomfort or vision impairment (untreated eye contact); no other known delayed toxic effects.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

No specific antidote; treat symptomatically (e.g., anti-burn, anti-inflammation, respiratory tract relief). Inform the physician of the product composition (50% HEDP aqueous solution) if medical treatment is required; for skin and eye burns, use professional anti-chemical burn drugs.

SECTION 5: Firefighting Measures

5.1 Extinguishing Media

- **Suitable:** Water spray, foam, carbon dioxide (CO₂), dry powder; use large amounts of water to cool the container and dilute the product for large-scale fire.
- **Unsuitable:** No special limitations on extinguishing media; avoid direct high-pressure water jet (may cause liquid splashing and spread of corrosive liquid).

5.2 Special Hazards Arising from the Substance or Mixture

Non-flammable, no fire risk under normal conditions; decomposes at high temperature (>200°C) to produce non-toxic carbon dioxide, water vapor and phosphoric acid fumes; phosphoric acid fumes cause mild respiratory tract irritation; corrosive to metal fire-fighting equipment at high temperature.

5.3 Advice for Firefighters

- Wear **Level A personal protective equipment** (positive pressure self-contained breathing apparatus, chemical protective clothing, acid-resistant gloves, face shield); fight the fire from the upwind direction and a safe distance.
- Cool the surrounding containers with plenty of water spray continuously to prevent high-temperature deformation and leakage; avoid contact with the corrosive liquid and decomposition fumes.
- After the fire, ventilate the scene thoroughly; do not touch the residual liquid with bare hands; clean the fire site with water to dilute the residual corrosive liquid.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

- Wear **Level B personal protective equipment** (acid-resistant chemical safety goggles, nitrile rubber gloves, acid-resistant lab coat, face shield, gas mask); no unprotected personnel enter the spill area.
- Evacuate non-essential personnel; set up a warning zone with "Corrosive Liquid, Wear PPE" signs; ensure good ventilation in the spill area.
- Do not touch the spilled liquid with bare hands; do not walk through the spilled liquid to avoid corrosion of shoes and skin.

6.2 Environmental Precautions

- Do not discharge the spilled liquid directly into sewers, rivers, lakes or soil; use sandbags or dikes to contain the spilled liquid to prevent it from flowing into water bodies and soil.
- Neutralize the spilled liquid with a small amount of weak alkali (e.g., sodium bicarbonate, lime) before disposal to reduce corrosivity; avoid excessive alkali to prevent secondary pollution.

6.3 Methods and Materials for Containment and Cleaning Up

- **Small Spill:** Absorb the liquid with inert acid-resistant materials (e.g., diatomite, acid-resistant absorbent cotton); transfer the absorbed waste to a sealed HDPE drum, label the drum with "HEDP - Corrosive Waste"; rinse the spill area with plenty of water, and collect the cleaning wastewater for centralized neutralization treatment.
- **Large Spill:** Contain the liquid with sandbags or acid-resistant dikes; transfer the liquid to a sealed anti-corrosive HDPE drum with an acid-resistant pump, label the drum with "Tupinal-SI (=HEDP) - Corrosive Liquid"; neutralize the remaining liquid on the ground with sodium bicarbonate powder, then rinse with plenty of water, and collect the wastewater for industrial treatment.

6.4 Reference to Other Sections

For disposal of spilled waste, see Section 13; for personal protection, see Section 8; for storage of the recovered product, see Section 7.

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling

- Operate in a **well-ventilated acid-resistant operation area**; install local exhaust ventilation (airflow rate ≥ 1.5 m/s) for large-scale use to collect mist; use closed acid-resistant equipment for mixing and transfer if possible.
- Do not mix with strong alkalis (NaOH, KOH), ammonia water, strong oxidants and organic amines at will to avoid violent exothermic reaction and reduce product efficacy.
- **Hygiene Measures:** Wash hands and face with soap and water thoroughly after handling; do not eat, drink or smoke in the operation area; provide dedicated acid-resistant hand washing facilities and emergency eye wash/shower equipment.
- Use acid-resistant tools (plastic, glass, stainless steel) for handling; do not use carbon steel, iron and concrete containers/tools to avoid corrosion.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

- **Storage Conditions:** Store in a **cool, dry, well-ventilated acid-resistant warehouse** at 5 ~ 30°C; avoid direct sunlight, high temperature (>35°C) and freezing (<0°C); keep the container tightly sealed with an acid-resistant cover.



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- **Incompatibilities:** Strong alkalis, ammonia water, strong oxidants (hydrogen peroxide, potassium permanganate), organic amines, food raw materials, cosmetic raw materials (unformulated) and drinking water.
- **Storage Class (TRGS 510):** 8 (Corrosive Liquids)
- **Shelf Life:** 24 months (unopened, under the specified storage conditions); use within 6 months after opening and seal the container tightly after each use.
- **Other:** Store in acid-resistant pallets (plastic, stainless steel); keep away from heat sources and open flames; store separately from other chemicals with obvious separation; mark the storage area with "Corrosive Chemicals" signs.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

- **Occupational Exposure Limit (OEL):**
 - China MAC: 1 mg/m³ (8h TWA, as phosphonic acid)
 - US OSHA PEL: 5 mg/m³ (8h TWA, total phosphorous compounds)
 - EU OEL: 2 mg/m³ (8h TWA)
- **Biological Exposure Limit:** No relevant biological exposure limit at present.

8.2 Exposure Controls

- **Engineering Controls:** Install local exhaust ventilation at the operation point; use closed acid-resistant mixing and transfer equipment; set up emergency eye wash and shower equipment within 10 meters of the operation area; use acid-resistant floor and wall materials in the operation area.
- **Personal Protective Equipment (PPE):**
 - Eye/Face: Acid-resistant chemical safety goggles (mandatory for all operations) + face shield (for large-scale handling and pouring); replace goggles if damaged.
 - Skin: Acid-resistant nitrile rubber gloves (thickness ≥ 0.20mm), acid-resistant lab coat, acid-resistant apron, acid-resistant boots; replace protective equipment if contaminated or damaged.
 - Respiratory: Half-face respirator with organic vapor/acid gas filter for mist handling; positive pressure self-contained breathing apparatus for large-scale spill or mist leakage.
 - Other: Acid-resistant hair cap, disposable acid-resistant sleeves; avoid wearing loose clothing and jewelry during operation.
- **Control of Environmental Exposure:** Do not discharge waste liquid and cleaning wastewater directly into the environment; neutralize to pH 6.0 ~ 8.5 before discharge; treat waste gas with acid gas absorption device.

SECTION 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

a) Physical State: Liquid b) Color: Colorless to pale yellow c) Odor: Faint acidic odor d) Melting Point/Freezing Point: ≤ 0°C (freezes into solid, recovers after thawing) e) Initial Boiling Point and Boiling Range: 100 ~ 105°C (water evaporation) f) Flammability (Liquid/Gas): Non-flammable g) Upper/Lower Flammability or Explosive Limits: Not applicable h) Flash Point: > 100°C (Closed Cup) i) Autoignition Temperature: > 300°C j) Decomposition Temperature: > 200°C (decomposes into phosphoric acid and carbon dioxide) k) pH Value (1% aqueous solution, 25°C): 1.0 ~ 3.0 l) Viscosity (25°C): 20 ~ 50 mPa·s m) Water Solubility: Fully miscible with water at any ratio; insoluble in non-polar organic solvents (toluene, xylene) n) Partition Coefficient (n-octanol/water): log Kow = -3.2 o) Vapor Pressure (25°C): < 1 hPa (equivalent to water vapor pressure) p) Density (25°C): 1.30 ~ 1.38 g/cm³ q) Relative Vapor Density: >1 (heavier than air) r) Corrosivity: Corrosive to carbon steel, iron, concrete and aluminum at high concentrations) Explosive Properties: Not explosive t) Oxidizing Properties: None

9.2 Other Safety Information

The product freezes at low temperature (<0°C), which is a physical change; thaw at room temperature (5~30°C) and stir evenly, the performance and active content remain unchanged, no impact on use; corrosive to metal equipment, it is recommended to use stainless steel (304/316), plastic or glass equipment for storage and handling.

SECTION 10: Stability and Reactivity

10.1 Chemical Stability

Stable under **recommended storage and use conditions (5~30°C, sealed)**; no decomposition, no chemical reaction; the scale and corrosion inhibition performance remains stable for a long time; stable under acidic, neutral and weak alkaline conditions ($\text{pH} \leq 8.5$).

10.2 Possibility of Hazardous Reactions

No hazardous reactions under normal storage and use conditions; no polymerization risk under any conditions (liquid or diluted solution); violent exothermic reaction occurs when mixed with strong alkalis in high concentration, which may cause splashing of corrosive liquid.

10.3 Conditions to Avoid

High temperature ($>35^\circ\text{C}$), direct sunlight, freezing ($<0^\circ\text{C}$), contact with strong alkalis/ammonia water/strong oxidants, long-term exposure to air, mixing with carbon steel/iron/concrete equipment.

10.4 Incompatible Materials

Concentrated sodium hydroxide, potassium hydroxide, ammonia water, hydrogen peroxide, potassium permanganate, organic amines, carbon steel, iron, concrete and aluminum materials.

10.5 Hazardous Decomposition Products

Decomposes at $>200^\circ\text{C}$ to produce non-toxic carbon dioxide, water vapor and phosphoric acid fumes; no other hazardous decomposition products; phosphoric acid fumes cause mild respiratory tract irritation if inhaled.

SECTION 11: Toxicological Information

11.1 Information on Toxicological Effects

• Acute Toxicity:

- Oral (Rat, LD_{50}): 1800 mg/kg bw (mild toxicity)
- Dermal (Rabbit, LD_{50}): 900 mg/kg bw (moderate dermal toxicity, due to corrosivity)
- Inhalation (Rat, LC_{50}): $> 5 \text{ mg/m}^3$ (4h exposure, mist) (mild respiratory tract irritation)
- **Skin Corrosion/Irritation:** Category 1B (Rabbit test); causes severe chemical burns and blistering on skin, irreversible damage in severe cases.
- **Serious Eye Damage/Eye Irritation:** Category 1 (Rabbit test); causes severe corneal burns and irreversible eye damage, may lead to vision loss.
- **Respiratory or Skin Sensitization:** No skin/respiratory sensitization (Guinea pig test).
- **Germ Cell Mutagenicity:** Ames test negative (no mutagenicity).
- **Carcinogenicity:** IARC Class 3 (not classifiable as carcinogenic to humans).
- **Reproductive/Developmental Toxicity:** No reproductive/developmental toxicity in animal studies; no teratogenic effect.
- **Specific Target Organ Toxicity (Single/Repeated Exposure):** STOT-SE 3 (respiratory tract irritation); no other target organ toxicity for normal use with PPE.
- **Aspiration Hazard:** None (liquid form, low volatility, no aspiration risk under normal operation).

11.2 Additional Information

Toxicity is mainly caused by the strong acidic corrosive effect of HEDP on skin, eyes and respiratory tract; no acute systemic toxicity at normal industrial use dosage (with PPE); long-term professional operation following safety guidelines has no significant adverse effects on the human body; avoid direct contact is the key to safe use.

SECTION 12: Ecological Information

12.1 Toxicity

• Aquatic Organisms:

- Zebrafish (LC_{50} , 96h): $> 1000 \text{ mg/L}$ (aqueous solution)
- Daphnia (EC_{50} , 48h): $> 500 \text{ mg/L}$ (aqueous solution)
- Green algae (EC_{50} , 72h): $> 800 \text{ mg/L}$ (aqueous solution)
- **Terrestrial Organisms:** Non-toxic to soil plants and microorganisms; neutralized HEDP ($\text{pH} 6-8$) can be used as a phosphorus nutrient for plants.

12.2 Persistence and Degradability

Biodegradable in aquatic and soil environments (biodegradation rate $> 80\%$ in 28d); degraded into non-toxic phosphoric acid and small molecular organic compounds by microorganisms; no persistent organic pollution.

12.3 Bioaccumulative Potential

No bioaccumulation potential (high water solubility, low log Kow); no biomagnification in the food chain; phosphorus elements are natural nutrients for organisms and can be metabolized.

12.4 Mobility in Soil

Moderate mobility; the liquid is adsorbed by soil organic matter, and the neutralized product can be absorbed by plants as phosphorus nutrient; no leaching into groundwater to cause pollution at normal dosage.

12.5 Results of PBT and vPvB Assessment

Not classified as PBT/vPvB (no persistence, no bioaccumulation, low toxicity to aquatic organisms).

12.6 Endocrine Disrupting Properties

No endocrine disrupting effect (in vitro/in vivo animal tests negative).

12.7 Other Adverse Effects

No known adverse ecological impacts at normal use dosage; high concentration (≥ 10000 mg/L) is corrosive to aquatic organisms and may cause temporary water body pH drop; neutralization before discharge can eliminate the impact.

SECTION 13: Disposal Considerations

13.1 Waste Treatment Methods

- **Product Waste/Expired Liquid:** Classified as **corrosive industrial liquid waste**; neutralize with weak alkali (sodium bicarbonate, lime) to pH 6.0 ~ 8.5 first, then discharge to the industrial wastewater treatment system; or send to licensed hazardous waste treatment facilities for centralized treatment.
- **Spill Waste/Absorbent Material:** Collect the contaminated absorbent material into a sealed HDPE drum, label it as "Corrosive Waste", and send it to licensed hazardous waste treatment facilities for disposal; do not dump it into the environment.
- **Packaging Waste:** Rinse the packaging with plenty of water to remove residual liquid, then neutralize the rinsing water; the clean acid-resistant packaging (HDPE, glass, stainless steel) can be recycled or disposed of as non-hazardous waste; do not reuse contaminated packaging.

13.2 Disposal Regulations

Comply with China's **Hazardous Waste Pollution Prevention and Control Law, Water Pollution Prevention and Control Law** and **Corrosive Chemicals Safety Management Regulation**; comply with EU REACH (EC 1907/2006) and US EPA hazardous waste disposal regulations; follow local corrosive waste disposal standards. Do not mix with non-hazardous waste for disposal.

SECTION 14: Transport Information

14.1 UN Number

ADR/RID: 3265; IMDG: 3265; IATA-DGR: 3265

14.2 UN Proper Shipping Name

ADR/RID: Corrosive liquid, acidic, organic, n.o.s. (1-Hydroxyethylidene-1,1-diphosphonic Acid)IMDG: Corrosive liquid, acidic, organic, n.o.s. (1-Hydroxyethylidene-1,1-diphosphonic Acid)IATA-DGR: Corrosive liquid, acidic, organic, n.o.s. (1-Hydroxyethylidene-1,1-diphosphonic Acid)

14.3 Transport Hazard Class(es)

ADR/RID: 8; IMDG: 8; IATA-DGR: 8

14.4 Packaging Group

ADR/RID: II; IMDG: II; IATA-DGR: II

14.5 Environmental Hazards

ADR/RID: No; IMDG Marine Pollutant: No; IATA-DGR: No

14.6 Special Precautions for User

1. Transport by **Class 8 corrosive goods dedicated closed anti-corrosive vehicles**; no open transportation, no mixed loading with other goods.
2. Use acid-resistant sealed packaging (HDPE plastic drum, stainless steel drum); the packaging must meet the Class 8 corrosive goods packaging standards; affix "Corrosive" hazard labels and product identification on the packaging.
3. Avoid package collision, extrusion and leakage during transportation; prevent direct sunlight, rain, high temperature and freezing; transport temperature 5 ~ 35°C.
4. Do not transport with strong alkalis, ammonia water, strong oxidants, flammable and explosive materials, food and drinking water; load and unload gently with acid-resistant tools, no rough operation.



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5. The transporter must hold a **hazardous chemicals transport qualification certificate**; the driver and escort must receive professional Class 8 corrosive goods safety training and hold valid certificates.

14.7 Incompatible Materials for Transport

Same as Section 7.2; avoid transport with strong alkalis, ammonia water, strong oxidants and organic amines.

SECTION 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

• National Regulations (China):

- Hazardous Chemicals Safety Management Regulation (Class 8 corrosive chemicals)
- Corrosive Chemicals Storage and Transportation Safety Regulation
- Water Pollution Prevention and Control Law
- Occupational Disease Prevention and Control Law

• International Regulations:

- GHS Classification (Rev. 9): Skin Corr. 1B, Eye Dam. 1, STOT-SE 3
- EU REACH (EC 1907/2006): Listed in TSCA Inventory, no SVHC
- US TSCA: Listed on the TSCA Inventory
- IMDG/IATA/ADR: Class 8 corrosive goods, UN 3265
- EPA (US): Approved for use as water treatment agent (40 CFR Part 141)

- **Industry Standards:** Complies with GB/T 2024-2019 (Industrial HEDP) and HG/T 3537-2010 (Water Treatment Agent HEDP).

15.2 Other Regulations

- The product label and packaging must be marked with hazard pictograms, signal words, hazard statements, precautionary statements, product name, batch number, shelf life and manufacturer information in accordance with GHS and Chinese hazardous chemicals labeling regulations.
- All batch production records, test reports and COA must be retained for ≥ 5 years in accordance with hazardous chemicals management requirements.
- The production, storage and transportation of the product must comply with ISO 9001 and ISO 14001 system standards, and the waste water, gas and residue must meet the national emission standards.

SECTION 16: Other Information

16.1 Further Information

This MSDS is based on current scientific and industrial knowledge, complying with GB/T 16483, GB/T 17519, GHS Rev.9 and international Class 8 corrosive chemicals safety standards. It is intended for the safe handling, storage, transport and disposal of Tupinal-SI (=HEDP). The supplier is not liable for any personal injury, property damage or environmental pollution caused by improper handling, non-compliance with storage/transport/disposal requirements, unauthorized use or failure to follow safety precautions.

16.2 Revision Information

- First Revision Date: 29 FEB 2026
- MSDS Validity: 3 years from the revision date (unless the product formula, concentration or hazard information changes)

16.3 Technical Support

For product application (water quality testing, dosage calculation, formulation compounding), on-site construction guidance and safety use training, contact the water treatment technical department at +86-021-50350029 ext. 810.

16.4 Key Reminder

This product is a 50% aqueous solution of HEDP, a Class 8 corrosive chemical, with strong acidic corrosivity. Strictly follow the safety operation procedures, wear qualified personal protective equipment during handling; store in a dedicated acid-resistant warehouse, and transport as Class 8 corrosive goods; neutralize the waste liquid before discharge to avoid environmental pollution; the product freezes at low temperature, which is a normal physical change, and can be thawed at room temperature for use without affecting performance.