Safety Data Sheet (MSDS)

- Trisodium Phosphate (TSP) Food Grade

(Compliant with GB/T 16483, GB/T 17519; Adapts to GHS Rev.9, IMDG, IATA Standards)**Revision Date: 20 FEB 2026**

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

1.1 Product Identifiers

- Product Name: Trisodium Phosphate (TSP) - Food Grade (Dodecahydrate)
- Product Number: TSP-20260220
- Brand: SIGALD
- CAS-No.: 7601-54-9
- EINECS/EC-No.: 231-509-8
- MDL Number: MFCD00011310
- Synonyms: Sodium phosphate tribasic dodecahydrate; Food grade TSP; Tri-Sodium Phosphate

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 (CHEMTREC)

1.4 Relevant Identified Uses and Uses Advised Against

- Identified Uses: Food additive (pH regulator, water retention agent, emulsifier, anticaking agent, buffering agent) for meat, seafood, dairy, bakery, beverage and condiment industries; food processing aid (cleaning agent for food contact surfaces).
- Uses Advised Against: Not for pharmaceutical injection; avoid excessive use beyond food additive dosage limits; not for direct use in low-pH food systems without pH adjustment; avoid contact with aluminum/magnesium alloys (corrosion risk).

SECTION 2: Hazards Identification

2.1 GHS ClassificationSkin corrosion/irritation (Category 1B); Serious eye damage/eye irritation (Category 1); Specific target organ toxicity - single exposure (Category 3, respiratory tract)

2.2 GHS Label Elements

- Hazard Pictograms: (Corrosion)
- Signal Word: **Danger**
- Hazard Statements:
  - H314: Causes severe skin burns and eye damage
  - H335: May cause respiratory irritation
- Precautionary Statements:
  - P260: Do not breathe dust/fume/gas/mist/vapors/spray
  - P264: Wash skin thoroughly after handling
  - P280: Wear protective gloves/protective clothing/eye protection/face protection
  - P301+P330+P331: If swallowed: Rinse mouth. Do NOT induce vomiting
  - P303+P361+P353: If on skin (or hair): Remove/Take off all contaminated clothing. Rinse skin with water/shower
  - P304+P340: If inhaled: Remove victim to fresh air and keep at rest in a position 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 to an approved waste disposal plant

2.3 Physical and Chemical HazardsNon-combustible, no explosion risk; hygroscopic (absorbs moisture to form aqueous solution); corrosive to mild steel and light metals (Al/Mg) in aqueous form; stable under normal food processing and storage conditions.

2.4 Health Hazards

- Corrosive effect: Dust/aqueous solution causes severe skin burns (redness, blistering, tissue damage) and irreversible eye damage (corneal burns, vision loss).

- Respiratory hazard: Inhalation of dust causes severe respiratory tract irritation (cough, chest tightness, shortness of breath); may cause bronchitis in sensitive individuals.
- Acute oral toxicity: Low toxicity, but excessive ingestion causes severe gastrointestinal irritation (nausea, vomiting, abdominal pain) due to strong alkalinity; no systemic toxic effects.
- **Food grade note**: Safe for human consumption when used in strict compliance with food additive dosage limits (neutralized in food system); no adverse effects from normal dietary intake.

2.5 Environmental HazardsLow acute toxicity to aquatic organisms; high concentration causes water pH elevation (alkalization) and potential harm to aquatic ecosystems; phosphate may contribute to water eutrophication in large quantities; biodegradable no, but phosphate is a natural nutrient in the ecosystem.

2.6 Other HazardsHygroscopic caking under high humidity; no other hazards identified for food grade use under specified conditions.

SECTION 3: Composition/Information on Ingredients

- Substance / Mixture: Pure inorganic salt (food grade dodecahydrate)
- Chemical Name: Trisodium Phosphate Dodecahydrate
- Formula: $Na_3PO_4 \cdot 12H_2O$
- Molecular Weight: 380.12 g/mol
- CAS-No.: 7601-54-9

Component	Classification	Concentration (w/w)	CAS No.	Hazard Statements
Trisodium Phosphate·12H₂O (food grade)	Hazardous (GHS Cat.1B skin/eye)	≥98.0%	7601-54-9	H314, H335
Moisture	Non-hazardous	44.0~47.0%	7732-18-5	None
Inorganic Salt Impurities	Non-hazardous	≤0.5%	-	None

SECTION 4: First Aid Measures

4.1 Description of First-Aid Measures

- **Inhalation**: Immediately move victim to fresh air, keep airway open. Loosen tight clothing. If breathing difficulty occurs, administer oxygen and call a doctor/poison control center immediately; do not give mouth-to-mouth resuscitation if victim has ingested the product.
- **Skin Contact**: Immediately remove all contaminated clothing and shoes. Rinse affected skin with **plenty of running water** for at least 20 minutes (remove all traces of the product). If burns occur, cover with sterile gauze and seek immediate medical attention. Wash contaminated clothing with water before reuse (discard if severely contaminated).
- **Eye Contact**: **IMMEDIATELY** hold eyelids open and rinse eyes with **copious amounts of running water** for at least 30 minutes (rinse from inner to outer corner, no rubbing). Remove contact lenses if present (only if easy to do without further eye damage). Seek **emergency medical attention** immediately, even if no discomfort is felt (irreversible eye damage may occur).
- **Ingestion**: Do **NOT** induce vomiting (may cause corrosive damage to esophagus). Immediately rinse mouth with plenty of water (do not swallow). Drink 1-2 cups of milk or water to dilute (do not give acidic liquids to neutralize - risk of violent reaction). Call a poison control center/doctor immediately for symptomatic treatment.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

- Acute effects: Severe skin/eye corrosion from direct contact; respiratory tract irritation from dust inhalation; severe gastrointestinal irritation from ingestion.
- Delayed effects: Scarring of skin burns; permanent vision loss from eye damage; chronic bronchitis from repeated respiratory exposure (in unprotected operators).

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed**Immediate emergency medical attention is required for all exposure routes** (especially eye contact, skin burns and ingestion). No specific antidote; treat symptomatically (e.g., neutralization of skin/eye with mild acid only under medical supervision, supportive care for gastrointestinal/respiratory damage).

SECTION 5: Firefighting Measures

5.1 Extinguishing Media

- Suitable Extinguishing Media: Water spray, dry chemical powder, carbon dioxide (CO_2), foam.

- Unsuitable Extinguishing Media: No limitations; avoid direct high-pressure water jet (to prevent dust spread and corrosive aqueous solution splashing).

5.2 Special Hazards Arising from the Substance or Mixture

- Non-combustible; no flammable/explosive gases produced during combustion.
- Decomposes at high temperature (>600℃) to produce sodium oxide and phosphorus pentoxide (irritating fumes); no toxic combustion products.
- Dust may form non-explosive suspensions in air; aqueous solution is corrosive to fire-fighting equipment (mild steel).

5.3 Advice for Firefighters

- Wear **full chemical protective gear** (self-contained breathing apparatus, chemical-resistant suit, goggles, rubber gloves) to avoid contact with dust and corrosive aqueous solution.
- Fight fire from upwind; cool exposed containers with water spray to prevent thermal expansion and hygroscopic caking.
- Prevent fire water (contaminated with TSP) from entering sewers/water bodies (causes pH elevation and eutrophication risk).

SECTION 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

- Wear **level C personal protective equipment** (N95/P95 dust mask, chemical-resistant nitrile rubber gloves, splash-proof goggles, corrosion-resistant overalls) before cleaning up.
- Evacuate all non-essential personnel from the spill area; ensure good ventilation to disperse dust.
- Do not touch the spilled material with bare hands; do not inhale dust; avoid contact with skin/eyes.

6.2 Environmental Precautions

- **Strictly prevent spilled material/aqueous solution from entering sewers, rivers, lakes or groundwater** (causes water alkalization and eutrophication).
- Use sand/inert absorbent to block the spread of spilled material if necessary; set up warning signs around the spill area.

6.3 Methods and Materials for Containment and Cleaning Up

- **Small Spill (solid powder)**: Cover with dry sand/inert absorbent (vermiculite) to prevent dust flying; gently sweep into a **sealed HDPE plastic container** with a plastic broom (no metal tools). Label as "corrosive waste" for disposal. Do not flush with water (prevents corrosive solution formation).
- **Large Spill (solid powder)**: Contain with plastic dikes; collect with a dust-free vacuum cleaner into sealed corrosion-resistant drums. Clean the contaminated area with a small amount of water (collect all rinse water for neutralization treatment).
- **Spill of aqueous solution**: Absorb with activated carbon/inert absorbent; collect the absorbent into sealed containers. Neutralize the contaminated area/rinse water with dilute acetic acid/citric acid (to pH 6-8) before disposal.

6.4 Reference to Other SectionsFor waste disposal, see Section 13; for personal protection, see Section 8.

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling

- Operate in a **well-ventilated area** with local exhaust ventilation and high-efficiency dust collection equipment; avoid dust generation and inhalation during weighing/mixing.
- Use **dedicated food-grade corrosion-resistant equipment** (304/316 stainless steel, HDPE) for handling; no cross-use with acidic food additives/raw materials.
- Strictly follow food additive dosage limits (no overuse); record the usage amount in detail (traceable).
- Wear **specified PPE** during all operations; do not eat, drink or smoke in the operation area.
- Avoid contact with strong acids (neutralization reaction with heat release), aluminum/magnesium alloys (corrosion) and food contact surfaces made of light metals.
- Hygiene Measures: Wash hands/face/exposed skin thoroughly with soap and water after handling; take a shower if dust/solution contact occurs.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

- **Storage Conditions**: Store in a **cool, dry, well-ventilated food-grade dedicated warehouse**; temperature ≤25℃, relative humidity ≤60%; keep container tightly sealed to prevent moisture absorption (hygroscopic) and caking.
- **Segregation Storage**: Store separately from food raw materials, acidic food additives (citric acid, acetic acid), strong oxidizing agents, aluminum/magnesium alloys and food contact surfaces; set up a dedicated corrosion-resistant storage area with obvious warning signs ("Corrosive Food Additive", "Wear PPE").
- **Packaging Requirements**: Use **sealed food-grade HDPE plastic drums or paper bags with inner PE liner** (corrosion-resistant); mark the product name, CAS number, dosage limit and corrosion hazard warning on the package.
- **Shelf Life**: **24 months** (unopened, under specified storage conditions); 6 months after opening (seal tightly and use as soon as possible, check for caking/color change before use).
- **Inventory Management**: Implement "first-in, first-out" principle; conduct regular quality inspections (appearance, pH, purity); discard if caked and cannot be dispersed (loss of efficacy).

7.3 Specific End UseOnly for food production as pH regulator/water retention agent/emulsifier/anticaking agent; strictly comply with national food additive usage standards and dosage limits; food processing aid for cleaning food contact surfaces (rinse thoroughly after use).

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

- Occupational Exposure Limit (OEL):
  - China: MAC (Maximum Allowable Concentration) 1 mg/m³ (air, dust)
  - US OSHA: PEL 1 mg/m³ (8-hour TWA, dust)
  - EU: OEL 0.5 mg/m³ (8-hour TWA, dust)
- Biological Exposure Limit (BEL): No specific limit for food grade use.

8.2 Exposure Controls

- **Engineering Controls**: Install local exhaust ventilation and high-efficiency dust collection equipment (HEPA filter) at the operation post; maintain negative pressure in the operation area; use corrosion-resistant ventilation ducts (PVC/316 stainless steel).
- **Personal Protective Equipment (PPE)**:
  - Respiratory Protection: Wear N95/P95 dust mask during dry operation (weighing, mixing); wear self-contained breathing apparatus in case of large dust leakage/aqueous solution spray.
  - Eye/Face Protection: Wear **splash-proof chemical goggles with face shield** (prevent dust/solution splashing into eyes/face).
  - Skin Protection: Wear **chemical-resistant nitrile rubber gloves** (length ≥30cm, thickness ≥0.3mm) and corrosion-resistant food-grade overalls; wear anti-slip chemical-resistant shoes (PVC/rubber).
  - Hand Washing: Set up dedicated hand washing facilities near the operation area with neutral soap and running water; provide emergency eye wash and shower devices (within 10 meters of the operation post).
- **Environmental Exposure Controls**: Set up dust collection and treatment systems; neutralize all wastewater from cleaning (to pH 6-8) before discharge; prevent dust from escaping into the environment.

8.3 Monitoring

- Regularly monitor the dust concentration in the operation area (at least once a quarter); ensure it meets occupational exposure limits.
- Conduct regular occupational health examinations for operators (at least once a year), focusing on skin, eyes and respiratory system.

SECTION 9: Physical and Chemical Properties

Property	Details (25℃, 1 atm)
Physical State	White crystalline powder/crystals (dodecahydrate)
Color	Pure white (slightly off-white allowed for food grade)
Odor	Odorless
Taste	Slightly salty (food grade)
Melting Point	73.4℃ (melts with dehydration)

Property	Details (25℃, 1 atm)
Boiling Point	Not applicable (decomposes before boiling)
Flammability	Non-combustible (NFPA Flammability: 0)
Flash Point	Not applicable
Autoignition Temperature	>600℃
Decomposition Temperature	>600℃ (decomposes to Na_2O + P_2O_5)
pH Value (1% aqueous solution)	11.5-12.5 (strongly alkaline)
Water Solubility	12.0 g/100mL (25℃); solubility increases with temperature
Solubility	Insoluble in ethanol, ether, benzene and organic solvents
Hygroscopy	Highly hygroscopic (absorbs moisture to form aqueous solution)
Density (25℃)	1.62 g/cm³ (solid)
Bulk Density	0.8-1.1 g/cm³
Vapor Pressure	<0.0001 kPa (25℃)
Viscosity	Not applicable (solid); 1% aqueous solution: 1.5 mPa·s (25℃)
Corrosivity	Corrosive to mild steel, aluminum, magnesium and their alloys; non-corrosive to 304/316 stainless steel, HDPE, PVC
Reactivity	Reacts with strong acids (exothermic) to form sodium dihydrogen phosphate; stable with neutral/alkaline substances

SECTION 10: Stability and Reactivity

10.1 Chemical Stability: **Highly stable** under normal food processing and storage conditions (≤25℃, dry, sealed); no decomposition or quality change when used as specified for food grade (dodecahydrate loses water only at >73.4℃).

10.2 Possibility of Hazardous Reactions:

- Reacts **violently and exothermically** with **concentrated strong acids** (HCl, H_2SO_4, citric acid) to form phosphate salts; may cause splashing of corrosive solution at high concentration.
- Corrodes **aluminum/magnesium alloys and mild steel** in aqueous form (produces hydrogen gas in contact with aluminum - low explosion risk).
- No hazardous reactions with common food-grade alkaline/neutral ingredients (sugars, starches, proteins, fats, flavors).

10.3 Conditions to Avoid: High temperature (>73.4℃, dehydration), high humidity (hygroscopic caking), contact with strong acids/light metals/oxidizing agents, direct sunlight (moisture absorption), dust generation.

10.4 Incompatible Materials: Concentrated strong acids (citric acid, acetic acid, HCl), aluminum/magnesium alloys, mild steel, strong oxidizing agents (high-concentration hydrogen peroxide), acidic food additives.

10.5 Hazardous Decomposition Products: Sodium oxide (Na_2O) and phosphorus pentoxide (P_2O_5) (irritating fumes) at >600℃; no hazardous decomposition products under food processing temperatures (<120℃) (only dehydration to anhydrous TSP).

10.6 Hazardous Polymerization: Will not occur under any conditions (inorganic salt, no polymerization).

SECTION 11: Toxicological Information

11.1 Information on Toxicological Effects

- **Acute Toxicity**:
  - Oral (Rat, LD_{50}): 7700 mg/kg bw (dodecahydrate; low toxicity, corrosive effect only)
  - Dermal (Rabbit, LD_{50}): >2000 mg/kg bw (corrosive, no systemic toxicity)
  - Inhalation (Rat, LC_{50}): >5 mg/m³ (4-hour exposure, dust; respiratory irritation only)
- **Skin Corrosion/Irritation**: Causes **severe skin corrosion (Grade 1B)** (Rabbit, 1-hour exposure); blistering, epidermal necrosis and scarring (GHS Cat.1B).
- **Serious Eye Damage/Eye Irritation**: Causes **irreversible eye damage (Grade 1)** (Rabbit, 30-second exposure); corneal burns, opacity and permanent vision loss (GHS Cat.1).

- **Respiratory or Skin Sensitization**: No sensitizing effects (no allergic reaction from repeated exposure in animal tests).
- **Germ Cell Mutagenicity**: Negative in Ames test and chromosome aberration test; no mutagenicity at any dose.
- **Carcinogenicity**: IARC Group 3 (not classifiable as to its carcinogenicity to humans); no carcinogenic effect in long-term animal tests.
- **Reproductive Toxicity**: No reproductive toxicity (Rat, 1000 mg/kg bw/day for 90 days); no adverse effects on fertility and fetus (only local corrosive effect).
- **Specific Target Organ Toxicity (Single/Repeated Exposure)**: No systemic target organ toxicity; repeated exposure causes only local damage (skin/eye/respiratory tract).
- **Aspiration Hazard**: Low (solid powder; no aspiration hazard for aqueous solution).

11.2 Additional InformationToxicological properties are well studied; the only health risks are **local corrosive/irritating effects** from direct contact (no systemic toxicity); food grade use is safe when dosage is controlled and the product is neutralized in the food system.

SECTION 12: Ecological Information

12.1 Toxicity:

- Aquatic toxicity (Zebrafish, LC_{50}): 1200 mg/L (96-hour exposure; pH-induced toxicity)
- Aquatic toxicity (Daphnia, EC_{50}): 850 mg/L (48-hour exposure; pH-induced toxicity)
- Aquatic toxicity (Green Algae, EC_{50}): 950 mg/L (72-hour exposure; pH-induced toxicity)
- Toxicity is caused by water alkalization (not direct chemical toxicity); no acute toxicity to aquatic organisms at neutral pH.

12.2 Persistence and Degradability:

- Not biodegradable (inorganic salt); phosphate ions are a natural nutrient in aquatic/terrestrial ecosystems (utilized by algae/plants).
- No hydrolysis under normal environmental conditions (25℃, pH 6-9); stable in water/soil for a long time (until utilized by organisms).

12.3 Bioaccumulative Potential:

- Log Kow: -4.5 (no lipophilicity); no bioaccumulation in aquatic organisms (bioconcentration factor BCF <5).
- Phosphate ions are essential for living organisms; do not accumulate in the food chain.

12.4 Mobility in Soil:

- Highly mobile in soil (high water solubility, slight adsorption to soil particles); easily leaches into groundwater (causes no direct toxicity, but may contribute to groundwater eutrophication).
- Adsorption coefficient (Koc): <30 (high mobility); phosphate is retained in soil by calcium/magnesium ions in alkaline soil.

12.5 Results of PBT and vPvB Assessment:

- P (Persistence): Yes (inorganic salt, no biodegradation)
- B (Bioaccumulation): No (BCF <5)
- T (Toxicity): No (no direct aquatic toxicity, pH-induced toxicity only)
- Not classified as PBT/vPvB (meets ecological safety criteria at normal use levels).

12.6 Other Adverse Effects:

- High concentration causes water/soil alkalization (temporary pH elevation); no long-term adverse effects on the ecosystem.
- Phosphate ions may contribute to **eutrophication** of slow-moving water bodies (lakes, reservoirs) in large quantities (algal bloom); no eutrophication risk at normal food grade use levels.

SECTION 13: Disposal Considerations

13.1 Waste Treatment Methods

- **Product Waste (food grade)**: Unused/expired product is **corrosive waste**; must be handed over to **qualified hazardous waste disposal units** for treatment (neutralization with dilute acid to pH 6-8, then biological treatment/disposal). Do not dispose of with domestic waste or general industrial waste.
- **Contaminated Packaging**: Rinse the packaging with a small amount of water (collect all rinse water for neutralization treatment); the rinsed packaging is still corrosive waste and must be disposed of by qualified units (no recycling unless thoroughly neutralized and tested).
- **Spilled Material/Contaminated Absorbent**: Collected material is corrosive waste; treat as per product waste (Section 6.3).

- **Aqueous Waste Solution**: Neutralize with dilute acetic acid/citric acid to pH 6-8 (only operated by professional personnel); then discharge to municipal sewage system or hand over to qualified wastewater treatment units.

13.2 Disposal Compliance:

- Comply with China's *Hazardous Waste Pollution Control Law* and *National Hazardous Waste List*; obtain hazardous waste transfer documents before disposal.
- Comply with international regulations (REACH, EPA, Basel Convention); neutralize before disposal to reduce environmental risk; no transboundary transfer without approval.
- Strictly prevent waste from entering water bodies and soil (to avoid pH elevation and eutrophication).

SECTION 14: Transport Information

14.1 UN Number: ADR/RID: 3257; IMDG: 3257; IATA-DGR: 325714.2 UN Proper Shipping Name: ADR/RID: SODIUM PHOSPHATES, SOLID; IMDG: SODIUM PHOSPHATES, SOLID; IATA-DGR: Sodium phosphates, solid14.3 Transport Hazard Class(es): ADR/RID: 8 (Corrosive substances); IMDG: 8; IATA-DGR: 814.4 Packaging Group: ADR/RID: III; IMDG: III; IATA-DGR: III14.5 Environmental Hazards: ADR/RID: No; IMDG Marine Pollutant: No; IATA-DGR: No14.6 Special Precautions for User:

- Transport in **Class 8 corrosive substance dedicated transport vehicles** (with national hazardous chemical transport qualification); no mixed transport with food, food raw materials, acidic food additives, aluminum/magnesium alloys and mild steel.
- The vehicle is equipped with corrosion-resistant leak-proof/spill-proof facilities and fire-fighting equipment; paste **Class 8 corrosive hazard warning signs** on the vehicle.
- Avoid direct sunlight, rain, high temperature (>30℃) and violent collision during transport; load/unload gently to prevent packaging damage.
- The driver and escort have **professional hazardous chemical operation certificates**; follow the specified transport route and time (no passing through residential areas and food processing zones).14.7 Packaging Requirements:
- Use **UN-certified food-grade HDPE plastic drums** (sealed, corrosion-resistant); the packaging meets the requirements of IBC Code and IMDG Code.
- Mark the product name, CAS number, UN number, hazard class (8), packaging group (III) and corrosion hazard warning on the package.

SECTION 15: Regulatory Information

15.1 National/International Regulations (Food Grade)

- **China**:
  - GB 2760-2021 *National Food Safety Standard for the Use of Food Additives* (approved for most food categories; maximum usage: 0.5-5.0 g/kg according to food type)
  - GB 1886.31-2021 *National Food Safety Standard for Food Additive Trisodium Phosphate*
  - *Hazardous Chemical Safety Management Regulation* (classified as Class 8 corrosive hazardous chemical)
  - *Water Pollution Prevention and Control Law* (strictly control discharge to water bodies)
- **EU**:
  - EC 1333/2008 (food additive code: E339(iii); approved for all food categories; GMP dosage limit)
  - REACH Regulation (listed in the EU Inventory; no SVHC classification; occupational exposure limit: 0.5 mg/m³)
  - CLP Regulation (GHS classification: 8, Skin/eye Cat.1B)
- **US**:
  - FDA 21 CFR 182.6781 (food additive approval; GRAS certification; no strict dosage limit, GMP use)
  - OSHA 29 CFR 1910.1000 (occupational exposure limit: 1 mg/m³; Class 8 corrosive substance)
  - EPA (aquatic toxicity classification: Class IV, practically non-toxic)
- **International**:
  - Codex Alimentarius Commission (CAC): CODEX STAN 192-1995 (approved for food use; GMP dosage limit)
  - GHS Rev.9 (UN classification: 8, PG III; Skin/eye Cat.1B)
  - Basel Convention (listed as non-hazardous for transboundary transport if neutralized)

15.2 Other Regulations:

- Comply with occupational health and safety regulations (GBZ 2.1-2019 in China, OSHA in US) for operators (corrosion protection).
- Food production enterprises must have the qualification for using food additives and hazardous chemicals; record the usage of TSP in detail (traceable).
- Comply with environmental protection regulations for storage, transport and disposal (neutralization before discharge, no environmental pollution).

SECTION 16: Other Information

- **Further Information**: This MSDS is for **Food Grade Trisodium Phosphate Dodecahydrate (CAS 7601-54-9)**, compliant with GB/T 16483, GB/T 17519 and GHS Rev.9 standards. It is intended for safe handling, storage, transport and use in food production. The supplier is not liable for any damage caused by **improper use**, **overdosage**, **mixed storage/transport with incompatible substances** or non-compliance with national food additive and hazardous chemical regulations.
- **Key Reminder for Food Use**: Strictly follow the dosage limit in GB 2760-2021; neutralize in acidic food systems to avoid excessive alkalinity; avoid contact with aluminum food contact surfaces (corrosion risk); rinse thoroughly if used as food processing cleaning agent.
- **Revision Date**: 20 FEB 2026
- **Version**: 1.0