

Safety Data Sheet: Isopropylated Triphenyl Phosphate (IPPP)

1. Identification

Product	Isopropylated Triphenyl Phosphate (IPPP); CAS 68937-41-7; EC 273-066-3
Use	Professional industrial ingredient and polymer 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 Isopropylated Triphenyl Phosphate (IPPP). 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	Reproductive toxicity Category 2; repeated-exposure organ toxicity Category 2; chronic aquatic hazard Category 1.
Signal word / symbols	Warning; GHS08, GHS09
Hazard statements	H361fd: suspected of damaging fertility and the unborn child. H373: may damage organs through repeated exposure. H410: very toxic to aquatic life with lasting effects.
Prevention	Use adequate ventilation; avoid inhaling mist. 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	Phenol, isopropylated, phosphate (3:1), CAS 68937-41-7; UVCB phosphate ester. The reference lists 90–100% ingredient and triphenyl phosphate >5%; these are reference composition, not batch declarations.
Supply grade	Industrial grade / phosphorus ≥8.1%
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

Inhalation	Move to fresh air; obtain medical assistance for significant exposure or breathing difficulty.
Skin	Remove contaminated clothing, rinse thoroughly and wash with soap and water. Obtain medical advice for symptoms.
Eyes	Rinse gently with clean water for at least 15 minutes; remove contact lenses when easy and obtain medical assessment.
Ingestion	Obtain immediate medical advice. Do not induce vomiting; give nothing by mouth to an unconscious person.
Medical attention	Show this reference sheet to the clinician. Suspected reproductive effects require exposure assessment.

5. Fire-Fighting Measures

Extinguishing media	Use water spray, foam, dry chemical or carbon dioxide suited to the surrounding fire.
Hazards	Overheating or fire can generate carbon and phosphorus oxides.
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 mist exposure.
Environment	Contain the release and protect drains and waterways. Report significant environmental contamination to the responsible authority.
Cleanup	Stop the leak if safe. Absorb liquid with a compatible inert material and collect in closed labelled containers. Do not wash into drains.

7. Handling and Storage

Handling	Use controlled transfer and effective ventilation. Avoid mist and prolonged contact; wear suitable chemical gloves, goggles and protective clothing. Provide eyewash facilities and obtain instruction before use.
Storage	Keep tightly closed in cool, dry, ventilated storage at ambient temperature. Protect from heat and contamination; provide containment to prevent environmental release.
Incompatibilities	No specific incompatible material is identified by the reference; avoid uncontrolled contamination.

8. Exposure Controls / Personal Protection

Exposure limits	UK reference limits for triphenyl phosphate: TWA 3 mg/m ³ and STEL 6 mg/m ³ . Apply current local limits and assess mist exposure.
Engineering controls	Use local extraction where mist 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, supply	Colorless to light-yellow transparent liquid
Specific gravity, 20/20°C, supply	1.15–1.19
Viscosity, 25°C, supply	64–75 mPa·s
Flash point, open cup, supply	≥220°C
Water response, reference	Insoluble
Additional properties	No unstated delivered-grade values are inferred.

10. Stability and Reactivity

Stability	Handle and store under the recommended conditions. Prevent contamination and unnecessary heating.
Incompatibilities	No specific incompatible material is identified by the reference; avoid uncontrolled contamination.
Decomposition	Overheating or fire can generate carbon and phosphorus oxides.

11. Toxicological Information

Exposure effects	Reproductive and repeated-exposure hazards require exposure control. Prevent aquatic release.
Reference classification	Reproductive toxicity Category 2; repeated-exposure organ toxicity Category 2; chronic aquatic hazard Category 1.
Toxicological data	The reference identifies suspected fertility/developmental effects and repeated-exposure organ injury. Its component studies are not delivered-batch tests.

12. Ecological Information

Environmental effects	The selected reference classifies long-lasting severe aquatic hazard. Keep material, absorbents and cleaning water out of drains and waterways.
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 9 — Environmentally hazardous liquid
UN number	UN 3082
Shipping name	Environmentally hazardous substance, liquid, n.o.s. (isopropylated triphenyl phosphate)
Class / packing group	Class 9, UN 3082, packing group III; environmentally hazardous liquid. IMDG marine pollutant in the full reference. The applied reference scope is stated in section 1.
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	Isopropylated Triphenyl Phosphate (IPPP); CAS 68937-41-7; EC 273-066-3
HS reference	291990; reference heading rather than a destination customs ruling.
Compliance	Apply applicable workplace, environmental and transport rules. A raw-material listing does not establish finished-product authorization.
Assessment	No ZXCHEM-specific chemical safety assessment or destination registration is asserted.

16. Other Information

Hazard meanings	H361fd: suspected of damaging fertility and the unborn child. H373: may damage organs through repeated exposure. H410: very toxic to aquatic life with lasting 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	2026.4; 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.

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