

Safety Data Sheet: Tetrachloroethylene

1. Identification

Product	Tetrachloroethylene; CAS 127-18-4; EC 204-825-9
Use	Compatible controlled industrial solvent processing.
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 Tetrachloroethylene. 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	Skin irritation Category 2; eye irritation Category 2; skin sensitization Category 1; carcinogenicity Category 1B; STOT single exposure Category 3 (central nervous system).
Signal word / symbols	Danger; GHS07, GHS08, GHS09
Hazard statements	H315/H319: skin and eye irritation. H317: allergic skin reaction. H336: drowsiness and dizziness. H350: cancer hazard. The reference also identifies persistent aquatic toxicity.
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	Tetrachloroethylene CAS 127-18-4, concentrated liquid reference. Exact industrial batch assay and stabilizer composition are not inferred.
Supply grade	Industrial solvent grade
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 mist.
Skin	Remove contaminated clothing and rinse skin thoroughly with water. Seek medical advice for persistent irritation.
Eyes	Rinse gently with clean water for at least 15 minutes. Remove contact lenses when easy and continue rinsing. Seek medical advice if irritation persists.
Ingestion	Rinse the mouth. Do not induce vomiting. Give nothing by mouth to an unconscious person. Obtain medical advice.
Effects / treatment	Vapor can affect the central nervous system. Irritation, skin sensitization and long-term cancer hazards require exposure control. 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	Strong heating can form phosgene, hydrogen chloride and chlorine-containing gases. Avoid welding and hot surfaces in solvent-exposed areas.
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 closed solvent transfer and effective vapor extraction. Wear suitable solvent-resistant gloves, eye protection and protective clothing. Avoid skin exposure and inhalation; assess workplace vapor exposure and do not use near welding, hot surfaces or incompatible reactive metals.
Storage	Keep tightly sealed in a cool, ventilated place with controlled access and secondary containment. Protect from sunlight, heat and incompatible acids, alkalis, reactive metals and oxidizers. Use only compatible containers and transfer equipment.
Incompatibilities	Strong acids, bases and oxidizers; susceptible metals including zinc and aluminum; amines.

8. Exposure Controls / Personal Protection

Exposure limits	Reference ACGIH TWA 25 ppm and STEL 100 ppm. Apply current local requirements and any stricter use-specific exposure controls.
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	Clear, colorless liquid
Boiling range, reference	120–122°C
Melting point, reference	–22°C
Vapor pressure at 20°C, reference	18 mbar
Water solubility	Low

10. Stability and Reactivity

Stability	Handle and store under the recommended conditions. Prevent contamination and unnecessary heating.
Incompatibilities	Strong acids, bases and oxidizers; susceptible metals including zinc and aluminum; amines.
Decomposition	Strong heating can form phosgene, hydrogen chloride and chlorine-containing gases. Avoid welding and hot surfaces in solvent-exposed areas.

11. Toxicological Information

Exposure effects	Vapor can affect the central nervous system. Irritation, skin sensitization and long-term cancer hazards require exposure control.
Reference classification	Skin irritation Category 2; eye irritation Category 2; skin sensitization Category 1; carcinogenicity Category 1B; STOT single exposure Category 3 (central nervous system).
Toxicological data	The selected current reference classifies carcinogenicity, skin sensitization and central-nervous-system effects. No safe exposure follows from solvent purity or odor.

12. Ecological Information

Environmental effects	Prevent release of chlorinated solvent to water or soil. Persistent aquatic effects and contamination require closed recovery and authorized waste handling.
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 6.1 — Toxic
UN number	UN 1897
Shipping name	Tetrachloroethylene
Class / packing group	DOT, TDG, IMDG and IATA: Class 6.1, packing group III.
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	Tetrachloroethylene; CAS 127-18-4; EC 204-825-9
HS reference	290323; 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	H315/H319: skin and eye irritation. H317: allergic skin reaction. H336: drowsiness and dizziness. H350: cancer hazard. The reference also identifies persistent aquatic toxicity.
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.

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