

Safety Data Sheet: Isopropyl Alcohol (IPA)

1. Identification

Product	Isopropyl Alcohol (IPA); CAS 67-63-0; EC 200-661-7
Use	Industrial cleaning, solvent formulation and chemical 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 Isopropyl Alcohol (IPA). 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	Flammable liquid Category 2; eye irritation Category 2A; specific target organ toxicity, single exposure Category 3 (central nervous system).
Signal word / symbols	Danger; GHS02, GHS07
Hazard statements	H225: highly flammable liquid and vapor. H319: serious eye irritation. H336: drowsiness or dizziness.
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	Isopropyl alcohol, CAS 67-63-0, EC 200-661-7; high-purity substance reference. Supplied assay ≥99.8%; batch impurities are not assigned by this reference.
Supply grade	Assay ≥99.8%
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 exposure may cause headache, dizziness or drowsiness. Eye contact can cause significant irritation. Treatment is symptomatic and directed by a clinician.

5. Fire-Fighting Measures

Extinguishing media	Use alcohol-resistant foam, dry chemical or carbon dioxide. Water spray can cool containers; avoid a strong water jet that spreads the liquid.
Hazards	Fire produces carbon oxides. Vapors may form explosive mixtures with air and flash back to ignition sources.
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 transfer and ventilation to control vapors. Bond and ground conductive equipment, eliminate ignition sources and wear chemical-resistant gloves and splash goggles. Avoid breathing vapor and prevent eye contact.
Storage	Store tightly closed in a cool, dry, well-ventilated flammable-liquid area. Keep away from heat, sparks, open flames, oxidizing agents and incompatible acids. Protect containers from direct sunlight.
Incompatibilities	Strong oxidizing agents, incompatible strong acids, halogens and acid anhydrides.
Specific use	Assess grade, residue and substrate compatibility for the complete industrial process.

8. Exposure Controls / Personal Protection

Exposure limits	reference: ACGIH TWA 200 ppm and STEL 400 ppm; OSHA PEL 400 ppm; NIOSH TWA 400 ppm and STEL 500 ppm. Check applicable current local limits.
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
Formula / molecular weight	C3H8O / 60.10 g/mol
Boiling range, reference	81–83°C
Melting point, reference	–89.5°C
Flash point, closed cup	12°C
Relative density, reference	0.785
Dynamic viscosity at 20°C	2.27 mPa·s
Water miscibility	Miscible
Autoignition temperature, reference	425°C
Other properties	Reported properties are manufacturer-reference values, not purchasing acceptance limits. Properties of a formulated or diluted material may differ.

10. Stability and Reactivity

Stability	Stable under recommended storage conditions. Avoid heat and uncontrolled vapor accumulation.
Hazardous reactions	Vapors can form explosive mixtures with air. Peroxides may form under unsuitable storage conditions; manage aged material under an appropriate solvent-control procedure.
Incompatibilities	Strong oxidizing agents, incompatible strong acids, halogens and acid anhydrides.
Decomposition	Fire produces carbon oxides. Vapors may form explosive mixtures with air and flash back to ignition sources.

11. Toxicological Information

Exposure effects	Vapor exposure may cause headache, dizziness or drowsiness. Eye contact can cause significant irritation.
Reference classification	Flammable liquid Category 2; eye irritation Category 2A; specific target organ toxicity, single exposure Category 3 (central nervous system).
Toxicological data	component reference: oral rat LD50 5,840 mg/kg, dermal rabbit LD50 13,900 mg/kg. These are reference-study values. Current classification identifies acute eye irritation and single-exposure central nervous system effects.

12. Ecological Information

Environmental effects	Prevent solvent release to drains and surface water; collect spills and contaminated washwater. No batch-specific ecotoxicity or environmental risk assessment is claimed.
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 3 — Flammable
UN number	UN 1219
Shipping name	Isopropanol (Isopropyl alcohol)
Class / packing group	DOT, ADR/RID, IMDG and IATA: Class 3, packing group II.
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	Isopropyl Alcohol (IPA); CAS 67-63-0; EC 200-661-7
HS reference	290512; 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	H225: highly flammable liquid and vapor. H319: serious eye irritation. H336: drowsiness or dizziness.
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.

Revision: 2026.2 | Revision date: 2026-10-06