

Safety Data Sheet: p-Isobutyl-alpha-methylhydrocinnamaldehyde

1. Identification

Product	p-Isobutyl-alpha-methylhydrocinnamaldehyde; CAS 6658-48-6; EC 229-695-0
Use	Professional fragrance and industrial aroma 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 p-Isobutyl-alpha-methylhydrocinnamaldehyde. 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 4 (US combustible liquid); skin irritation Category 2; skin sensitization Category 1B.
Signal word / symbols	Warning; GHS07
Hazard statements	H227: Combustible liquid. H315: Causes skin irritation. H317: May cause an allergic skin reaction.
Prevention	Use effective local ventilation, chemical-resistant gloves, splash goggles and suitable protective clothing. Avoid skin contact, mist and vapour inhalation. Control ignition sources; select respiratory protection from the workplace exposure assessment.
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	p-Isobutyl-alpha-methylhydrocinnamaldehyde, CAS 6658-48-6, EC 229-695-0. Selected substance reference 90–100%; supply chromatographic purity 98.0–100.0%. The reference range does not establish supplied-batch stabilizer or impurity fractions.
Supply grade	Purity 98.0–100.0%
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 wash skin with plenty of soap and water. Obtain medical advice if irritation or rash occurs. Wash clothing before reuse.
Eyes	Rinse with plenty of water for at least 15 minutes. Remove contact lenses if easy and continue rinsing. Obtain medical advice if irritation persists.
Ingestion	Do not induce vomiting. Never give anything orally to an unconscious person. Consult a poison centre or physician immediately.
Effects / treatment	Skin contact can cause irritation, dermatitis or an allergic reaction. Vapours can irritate exposed eyes and airways. Obtain medical advice for persistent symptoms. Treatment is symptomatic and directed by a clinician.

5. Fire-Fighting Measures

Extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Avoid a high-volume water jet. Firefighters require self-contained breathing apparatus and full protective clothing; contain contaminated fire water.
Hazards	Stable under recommended conditions. Vapours can form explosive mixtures with air. Fire or excessive heating can release irritating and toxic fumes.
Protection	Firefighters require suitable protective clothing and self-contained breathing equipment. Prevent contaminated firefighting water entering drains.

6. Accidental Release Measures

Personal protection	Use effective local ventilation, chemical-resistant gloves, splash goggles and suitable protective clothing. Avoid skin contact, mist and vapour inhalation. Control ignition sources; select respiratory protection from the workplace exposure assessment.
Containment	Remove ignition sources. Contain with compatible non-combustible absorbent and collect in labelled closed waste containers. Avoid splashes and mist.
Environment	Prevent discharge to drains, soil and waterways; arrange an approved waste-disposal route.

7. Handling and Storage

Handling	Use effective local ventilation, chemical-resistant gloves, splash goggles and suitable protective clothing. Avoid skin contact, mist and vapour inhalation. Control ignition sources; select respiratory protection from the workplace exposure assessment.
Storage	Keep tightly sealed in a cool, dry, well-ventilated area, protected from direct light, heat, sparks and flames. Store drums upright and prevent contamination.
Incompatibilities	No substance-specific incompatible material is identified in the selected reference. Prevent contamination and keep away from heat and ignition sources.

8. Exposure Controls / Personal Protection

Exposure limits	The selected reference does not establish an ingredient-specific occupational exposure limit. Apply effective ventilation and local workplace requirements.
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	Colourless to pale-yellow liquid
Formula / molecular weight	C ₁₄ H ₂₀ O / 204.31 g/mol
Physical state	Colourless to pale-yellow liquid
Molecular formula	C ₁₄ H ₂₀ O
Molecular weight	204.31 g/mol
Freezing point, reference	4°C
Boiling point, reference	257°C at 1013 hPa
Flash point, selected reference	70°C, closed cup
Density, reference at 20°C	0.93531 g/cm ³
Water solubility, reference at 25°C	2.76 mg/L
Partition coefficient, reference	log Pow 3.8
Autoignition temperature, reference	360°C
Other properties	Product-specific values for odor threshold, vapor pressure, partition coefficient, autoignition temperature and viscosity are not supplied by the selected reference set. No values are inferred.

10. Stability and Reactivity

Stability	Handle and store under the recommended conditions. Prevent contamination and unnecessary heating.
Incompatibilities	No substance-specific incompatible material is identified in the selected reference. Prevent contamination and keep away from heat and ignition sources.
Decomposition	Stable under recommended conditions. Vapours can form explosive mixtures with air. Fire or excessive heating can release irritating and toxic fumes.

11. Toxicological Information

Exposure effects	Skin contact can cause irritation, dermatitis or an allergic reaction. Vapours can irritate exposed eyes and airways. Obtain medical advice for persistent symptoms.
Reference classification	Flammable liquid Category 4 (US combustible liquid); skin irritation Category 2; skin sensitization Category 1B.
Data limits	The selected reference reports rat inhalation LC ₅₀ >5 mg/L over 4 hours. Skin irritation and skin sensitization are classified. Numerical acute oral and dermal endpoints are not available; absence of such values is not evidence of harmlessness.

12. Ecological Information

Environmental effects	The selected reference gives log Pow 3.8 but no quantitative aquatic toxicity, biodegradation or soil-mobility endpoint. Prevent releases to water, soil and drains.
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	Non-dangerous goods (IMDG / IATA)
UN number	Not assigned for IMDG / IATA; DOT NA 1993
Shipping name	Not regulated for IMDG / IATA; US DOT: COMBUSTIBLE LIQUID, N.O.S.
Class / packing group	IMDG / IATA: non-dangerous goods for the selected neat-liquid reference. US DOT: NA 1993, combustible liquid, packing group III; domestic exemptions and consignment conditions require separate assessment.
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	p-Isobutyl-alpha-methylhydrocinnamaldehyde; CAS 6658-48-6; EC 229-695-0
HS reference	291229; reference heading rather than a destination customs ruling.
Compliance	Apply applicable workplace, environmental and transport rules. A raw-material listing does not establish authorization for a finished formulation.
Assessment	No ZXCHEM-specific chemical safety assessment or destination registration is asserted.

16. Other Information

Hazard meanings	H227: Combustible liquid. H315: Causes skin irritation. H317: May cause an allergic skin reaction.
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	2026.1; prepared 2026-10-07. 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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