

Safety Data Sheet: Benzyl Benzoate

1. Identification

Product	Benzyl Benzoate; CAS 120-51-4; EC 204-402-9
Use	Professional ester-solvent, fragrance and textile formulation.
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 Benzyl Benzoate. 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	Acute oral toxicity Category 4. The reference also identifies very toxic aquatic effects and long-lasting environmental hazard.
Signal word / symbols	Warning; GHS07, GHS09
Hazard statements	H302: harmful if swallowed. Very toxic to aquatic life; toxic to aquatic life with long-lasting effects.
Prevention	Use ventilated, contained liquid transfer. Wear compatible gloves, splash goggles and protective clothing. Avoid ingestion, mist and direct contact; prevent releases to drains and waterways.
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	Benzyl benzoate, CAS 120-51-4, EC 204-402-9. The selected liquid reference lists >95%; supply purity ≥99.0%. No unidentified impurity recipe is asserted.
Supply grade	Purity ≥99.0%
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 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	Swallowing can cause gastrointestinal irritation, nausea, vomiting or diarrhoea. Direct contact or mist can cause discomfort; seek medical advice after exposure or persistent symptoms. Treatment is symptomatic and directed by a clinician.

5. Fire-Fighting Measures

Extinguishing media	Use water spray, carbon dioxide, dry chemical or alcohol-resistant foam. Keep containers away from ignition and heat; contain firefighting runoff. Firefighters need protective clothing and breathing apparatus.
Hazards	Fire or thermal decomposition can release carbon monoxide, carbon dioxide and irritating vapours.
Protection	Firefighters require suitable protective clothing and self-contained breathing equipment. Prevent contaminated firefighting water entering drains.

6. Accidental Release Measures

Personal protection	Restrict access and use ventilation and appropriate PPE. Avoid contact, mist and slippery surfaces.
Containment	Stop the leak when safe, absorb with compatible inert material and collect in labelled closed containers.
Environment	Prevent drainage and uncontrolled release; use an approved disposal route.

7. Handling and Storage

Handling	Use ventilated, contained liquid transfer. Wear compatible gloves, splash goggles and protective clothing. Avoid ingestion, mist and direct contact; prevent releases to drains and waterways.
Storage	Keep tightly closed in a cool, dry, ventilated place away from strong oxidizers, strong reducing agents and excessive heat. Material can crystallize near its melting region; follow the agreed recovery procedure before use.
Incompatibilities	Strong oxidizing agents, strong reducing agents and excessive heat.

8. Exposure Controls / Personal Protection

Exposure limits	The selected reference lists no substance-specific numerical occupational exposure limit. Use effective mist and vapour control and apply 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 oily liquid
Formula / molecular weight	C ₁₄ H ₁₂ O ₂ / 212.24 g/mol
Form, supply	Colourless oily liquid
Melting region, supply	Approximately 17°C
Flash point, reference	147°C
Boiling point, reference	323°C
Water solubility, reference	15.3 mg/L at 20°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	Strong oxidizing agents, strong reducing agents and excessive heat.
Decomposition	Fire or thermal decomposition can release carbon monoxide, carbon dioxide and irritating vapours.

11. Toxicological Information

Exposure effects	Swallowing can cause gastrointestinal irritation, nausea, vomiting or diarrhoea. Direct contact or mist can cause discomfort; seek medical advice after exposure or persistent symptoms.
Reference classification	Acute oral toxicity Category 4. The reference also identifies very toxic aquatic effects and long-lasting environmental hazard.
Data limits	Reference rat oral LD ₅₀ 500 mg/kg and rabbit dermal LD ₅₀ 4,000 mg/kg. The substance is harmful if swallowed; no delivered-lot chronic study is established.

12. Ecological Information

Environmental effects	Very toxic to aquatic organisms and hazardous to the aquatic environment over prolonged exposure. Prevent all uncontrolled drainage and contain spill or firewater; supplied-grade numerical aquatic studies are not established.
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
UN number	UN 3082
Shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (benzyl benzoate)
Class / packing group	DOT / TDG, IMDG and IATA: UN 3082, Class 9, packing group III for the liquid substance reference. Observe environmental-hazard controls and applicable package requirements.
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	Benzyl Benzoate; CAS 120-51-4; EC 204-402-9
HS reference	291631; 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	H302: harmful if swallowed. Very toxic to aquatic life; toxic to aquatic life with long-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	2026.1; 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.

Revision: 2026.1 | Revision date: 2026-10-07