

Safety Data Sheet: Lily Aldehyde

1. Identification

Product	Lily Aldehyde; CAS 80-54-6; EC 201-289-8
Use	Permitted professional fragrance and industrial formulation development; not for EU cosmetic products.
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 Lily Aldehyde. 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 toxicity (oral) Category 4; skin irritation Category 2; skin sensitization Category 1B; reproductive toxicity Category 1B; aquatic chronic hazard Category 3.
Signal word / symbols	Danger; GHS07, GHS08
Hazard statements	H302: Harmful if swallowed. H315: Causes skin irritation. H317: May cause an allergic skin reaction. H360: May damage fertility or the unborn child. H412: Harmful to aquatic life with long lasting effects.
Prevention	Use effective ventilation and avoid vapour, mist and direct contact. Wear chemical-resistant gloves, splash goggles and protective clothing. Do not handle until safety precautions are understood; apply controls for reproductive toxicity and skin sensitization.
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	Butylphenyl methylpropional, CAS 80-54-6, EC 201-289-8. Selected reference discloses ≥50% for the substance listing; no unverified solvent, additive or supplied-batch assay fraction is assigned.
Supply grade	Commercial fragrance 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	Immediately rinse with plenty of water for at least 15 minutes. Remove contact lenses if easy and continue rinsing. Obtain urgent medical or ophthalmological assistance.
Ingestion	Do not induce vomiting. Rinse mouth if conscious and obtain medical advice. Never give anything orally to an unconscious person.
Effects / treatment	Harmful if swallowed; skin irritation and allergic skin reaction are possible. Reproductive toxicity requires exposure prevention. Seek medical advice after exposure or if concerned. 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	Fire can release carbon monoxide and unidentified organic combustion products. Heated closed containers can develop pressure.
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 ventilation and avoid vapour, mist and direct contact. Wear chemical-resistant gloves, splash goggles and protective clothing. Do not handle until safety precautions are understood; apply controls for reproductive toxicity and skin sensitization.
Containment	Stop leakage when safe. Absorb liquid with compatible inert material and collect in labelled closed containers. Avoid mist and splashes.
Environment	Keep material out of drains and waterways. Use an approved waste-disposal route.

7. Handling and Storage

Handling	Use effective ventilation and avoid vapour, mist and direct contact. Wear chemical-resistant gloves, splash goggles and protective clothing. Do not handle until safety precautions are understood; apply controls for reproductive toxicity and skin sensitization.
Storage	Store tightly closed in compatible containers in a cool, dry, ventilated place protected from light, heat and ignition sources. Segregate from strong acids, strong bases and oxidizers.
Incompatibilities	Strong acids, strong bases and oxidizing agents; heat, flames and ignition sources.

8. Exposure Controls / Personal Protection

Exposure limits	No ingredient-specific numerical occupational exposure limit is known in the selected reference. Provide effective ventilation and control vapour, mist and direct contact.
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	Liquid
Freezing point, reference	−20°C
Boiling point, reference at 1 atm	279°C
Flash point, selected reference	79°C
Autoignition temperature, reference	250°C
Density, reference at 20°C	0.942–0.949 g/mL
Water solubility, reference at 20°C	0.033 g/L
Vapour pressure, reference at 20°C	0.0014 hPa
Partition coefficient, reference at 24°C	log Pow 4.2
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 acids, strong bases and oxidizing agents; heat, flames and ignition sources.
Decomposition	Fire can release carbon monoxide and unidentified organic combustion products. Heated closed containers can develop pressure.

11. Toxicological Information

Exposure effects	Harmful if swallowed; skin irritation and allergic skin reaction are possible. Reproductive toxicity requires exposure prevention. Seek medical advice after exposure or if concerned.
Reference classification	Acute toxicity (oral) Category 4; skin irritation Category 2; skin sensitization Category 1B; reproductive toxicity Category 1B; aquatic chronic hazard Category 3.
Data limits	Reference rat oral LD ₅₀ 1,390 mg/kg and rat dermal LD ₅₀ >2,000 mg/kg. Causes skin irritation and may cause skin sensitization. Reproductive toxicity Category 1B is retained; a missing numerical chronic endpoint does not remove that hazard.

12. Ecological Information

Environmental effects	Selected reference fish LC50 2.04 mg/L over 96 hours, Daphnia EC50 10.7 mg/L over 48 hours and algal ErC50 29.16 mg/L over 48 hours. Reference ready biodegradation >80%; prevent release because chronic aquatic hazard remains classified.
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
UN number	Not assigned
Shipping name	Not regulated as dangerous goods
Class / packing group	ADR / RID / ADN, IMDG and IATA-ICAO: non-dangerous goods in the selected reference; no UN number or packing group assigned.
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	Lily Aldehyde; CAS 80-54-6; EC 201-289-8
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.
EU cosmetic restriction	Butylphenyl methylpropional, CAS 80-54-6, is prohibited in EU cosmetic products under Annex II of Regulation (EC) No 1223/2009 as amended by Regulation (EU) 2021/1902, applicable from 1 March 2022. The substance is subject to reproductive-toxicity and SVHC-related controls.

16. Other Information

Hazard meanings	H302: Harmful if swallowed. H315: Causes skin irritation. H317: May cause an allergic skin reaction. H360: May damage fertility or the unborn child. H412: Harmful 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