

Safety Data Sheet: N,N-Bis(3-aminopropyl)dodecylamine

1. Identification

Product	N,N-Bis(3-aminopropyl)dodecylamine; Laurylamine dipropylenediamine
Identity	CAS 2372-82-9; EC 219-145-8
Use	Industrial antimicrobial formulation ingredient. Professional use; not a ready-to-use disinfectant.
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 N,N-Bis(3-aminopropyl)dodecylamine. 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 basis	Manufacturer reference reports toxic ingestion, corrosive effects, harm from repeated exposure and severe aquatic hazards.
Signal word / symbols	Danger; GHS05, GHS06, GHS08, GHS09
Hazard codes	H301; H314; H373; H400; H410. Full hazard meanings appear in Section 16.
Prevention	Prevent skin and eye contact. Avoid inhaling mist or vapor. Use gloves, protective clothing and eye/face protection. Wash after work; keep food and drink out of the work area.
Exposure response	Obtain immediate medical help. Rinse contaminated skin and eyes with water. After ingestion rinse the mouth without inducing vomiting. Move an inhalation casualty to fresh air.
Environmental control	Contain spills and prevent release into drains or waterways. Restrict access to storage and use an authorized waste contractor.



3. Composition / Information on Ingredients

Reference substance	N,N-Bis(3-aminopropyl)dodecylamine, CAS 2372-82-9; EC 219-145-8. reference purity ≥97%.
Supply specification	ZXCHEM technical purchasing parameter: total amine value 341–365 mg HCl/g. Amine value is not a mass-percent purity measurement.
Composition boundary	The cited reference purity does not certify a ZXCHEM batch analysis. No water, solvent or stabilizer percentage is invented in this document.

4. First-Aid Measures

General	Protect rescuers from contamination. Obtain urgent medical assessment and provide the product information to the clinician.
Inhalation	Move the person away from exposure to fresh air. Seek prompt medical attention. Trained personnel should provide breathing support if necessary.
Skin	Remove contaminated clothing. Rinse affected skin with plenty of flowing water. Obtain medical attention for corrosive exposure. Launder clothing before reuse.
Eyes	Begin rinsing immediately with plenty of clean water. Remove contact lenses when easy, continue rinsing for at least 15 minutes and obtain urgent medical care.
Ingestion	Rinse the mouth; do not induce vomiting or attempt neutralization. Give nothing by mouth to an unconscious person. Seek emergency medical help.
Effects / treatment	Potential severe burns and eye injury; ingestion is toxic. Treatment is symptomatic and directed by a medical professional.

5. Fire-Fighting Measures

Extinguishing media	Use foam, dry chemical or carbon dioxide suitable for the surrounding fire.
Fire hazards	Combustion can produce irritating or toxic gases, including carbon and nitrogen oxides. Prevent contaminated runoff entering drains.
Protection	Firefighters require self-contained breathing equipment and suitable protective clothing. Cool exposed containers from a safe location.

6. Accidental Release Measures

Personnel	Isolate the area. Avoid contact and aerosol exposure; provide ventilation when safe. Cleanup requires trained personnel and appropriate chemical protection.
Environment	Protect drains, soil and waterways. Contain the spill and notify the responsible authority for significant environmental releases.
Cleanup	Stop leakage if safe. Absorb liquid with an inert compatible material and collect in closed, labelled containers. Arrange authorized disposal; do not wash product into drains.

7. Handling and Storage

Handling	Use controlled transfer and effective ventilation to limit mist. Avoid splashes. Provide readily accessible eyewash and emergency washing facilities.
Storage	Keep containers closed in a cool, dry, ventilated area. Prevent contamination and maintain compatible secondary containment. Store away from strong acids and oxidizers.
Use	Validate compatibility and operating conditions in the complete industrial formulation before scale-up.

8. Exposure Controls / Personal Protection

Limits	No substance-specific occupational limit is provided by the selected manufacturer references. Apply local workplace exposure requirements.
Engineering controls	Provide local extraction where transfer or processing can generate mist. Maintain eyewash and safety shower access.
Personal protection	Chemical-resistant gloves selected for the exposure duration, splash goggles, face protection for splash tasks and suitable protective clothing/footwear.
Respiratory controls	If ventilation does not adequately control airborne exposure, use a properly selected respirator under an occupational respiratory-protection program.
Hygiene	Remove contamination promptly. Wash after handling; do not eat, drink or smoke in the work area.

9. Physical and Chemical Properties

State / appearance	Liquid; clear, colorless to light yellow in the neat-material reference.
Formula / molecular weight	C18H41N3 / 299.54 g/mol
Flash point	184°C, reference value; not a ZXCHEM release specification.
Specific gravity	0.87 (20/20), reference value.
Other properties	Odor threshold, melting/boiling range, vapor pressure, pH, partition coefficient and viscosity: no validated value supplied by the selected reference set.

10. Stability and Reactivity

Stability	Handle under the recommended storage conditions. Avoid excessive heating and contact with incompatible reagents.
Incompatibilities	Strong oxidizing agents and strong acids. Assess compatibility before mixing with other chemicals.
Decomposition	Thermal breakdown may release carbon monoxide, carbon dioxide and nitrogen oxides.

11. Toxicological Information

Acute effects	Toxic by ingestion in the selected current manufacturer classification. Corrosive contact can cause severe skin burns and eye injury.
Repeated exposure	The manufacturer reference identifies potential organ effects from repeated or prolonged exposure. Avoid inhaling aerosols and minimize exposure.
Data limits	Validated product-specific numerical acute toxicity, sensitization, reproductive and carcinogenicity study results are not supplied by the selected reference set; no values are inferred.

12. Ecological Information

Aquatic effects	The selected current reference classifies the material as highly hazardous to aquatic organisms, with persistent adverse aquatic effects.
Controls	Prevent environmental discharge of concentrate, spills and contaminated wash water.
Other endpoints	Quantitative biodegradation, bioaccumulation, mobility and PBT/vPvB assessment results are not provided by the selected reference set.

13. Disposal Considerations

Product	Collect surplus material and spill residues for a licensed chemical-waste contractor. Follow local hazardous-waste requirements.
Packaging	Empty containers retain hazardous residues. Do not reuse without an approved decontamination process. Dispose of contaminated packaging through an authorized route.

14. Transport Information

Reference basis	CS-0076902 neat-material shipping entry, consulted 2026-10-06. This is reference information rather than a declaration for a specific ZXCHEM consignment.
UN number	UN 2735
Proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S. (N,N-Bis(3-aminopropyl)dodecylamine)
Class / packing group	Class 8 / Packing Group III, selected reference.
Environmental precautions	Prevent aquatic release. Apply the mode-specific environmental marking and documentation requirements to the supplied consignment.
Handling in transport	Use compliant compatible packaging, protect closures and secure containers against damage or leakage. Different formulations or supplier grades may have a different UN entry.

15. Regulatory Information

Identity	CAS 2372-82-9; EC 219-145-8. Reference HS heading: 292129.
Use and compliance	Apply workplace chemical-protection, environmental and dangerous-goods rules in the destination market. A raw-material listing does not establish finished-product biocide authorization.
Assessment	No ZXCHEM-specific chemical safety assessment or destination registration is claimed by this reference document.

16. Other Information

Hazard meanings	H301: ingestion is toxic. H314: severe corrosive injury to skin and eyes. H373: possible organ damage from repeated or extended exposure. H400/H410: severe aquatic toxicity, including lasting effects.
Safety data scope	Hazard and transport entries use the current applicable reference. Physical-property values are reference data. Superseded hazard and transport entries are excluded.
Limitations	Prepared for the identified neat-material reference grade. It is not an analytical certificate, a transport declaration or a safety assessment of an unverified 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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