# Safety Data Sheet: Quaternium-80 Conditioning Concentrate

Version 2026 | Revision date: 04 November 2026 | Language: English

## 1. Identification

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| **Product** | Quaternium-80 Conditioning Concentrate |
| **Use** | Professional personal-care and cosmetic formulation. |
| **Variants / identity** | Quaternium-80 concentrate - Quaternium-80 Conditioning Concentrate; Quaternium-80; Butylene Glycol |
| **Supplier** | Hainan Zhongxin Chemical Co., Ltd. |
| **Address** | Room 1001, Building A, Caohejing Center, No. 1520 Gumei Road, Xuhui District, Shanghai, China. |
| **Emergency telephone** | +86-21-54265599 (office hours, China time, UTC+8) |
| **Website / Email** | www.zxchem.com / sales@zxchem.com.cn |
| **Safety information scope** | Reference safety information for the stated grade. |

## 2. Hazards Identification

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| **Quaternium-80 concentrate / GHS classification** | |
| **Quaternium-80 concentrate / Signal word** | |
| **Quaternium-80 concentrate / Pictograms** | |
| **Quaternium-80 concentrate / Assigned hazard statements** | |
| **Quaternium-80 concentrate / Other hazards** | Inhalation toxicity and pulmonary effects are reported; avoid aerosols. Environmental harm is reported; prevent release. |

Avoid contact and inhalation of dust or mist. Wear suitable protective gloves, clothing and eye protection. Wash after handling. Do not eat, drink or smoke during use.

## 3. Composition / Information on Ingredients

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| **QUATERNIUM-80** | CAS 134737-05-6; 50%-60% |
| **BUTYLENE GLYCOL** | CAS 107-88-0; 40%-50% |

Ingredient declarations and ranges apply to the named variant. Ranges and maxima are not simultaneous formulation targets or batch analytical results.

## 4. First-Aid Measures

Eyes: Immediately rinse with water.

Skin: If in contact with the skin, wash with soap and water. If skin irritation persists, consult a doctor.

Inhalation: Move to fresh air and seek medical attention immediately.

Ingestion: Thoroughly clean the mouth with water. If symptoms occur, seek medical attention immediately. Annotation: Symptomatic treatment. Reminder to Doctors: Treat according to symptoms.

## 5. Fire-Fighting Measures

Combustibility: Flammability. Flash Point: > 101 °C. Closed cup test method. Extinguishing Agent: Use dry chemical, foam or water mist in case of fire. Use carbon dioxide, dry chemical or water mist during low heat. Container exposed to fire can be cooled with water. Special Firefighting Procedure and Equipment: When extinguishing large fire involving chemical, self-contained breathing apparatus and protective clothing should be worn. According to the local emergency plan, decide whether to evacuate or isolate the area. Use water to cool container affected by fire. Harmful Combustion Products: Carbon dioxide and trace amount of incompletely burned carbide, silicon dioxide, formaldehyde, etc. Prohibited Fire Extinguishing Agent: Not determined.

## 6. Accidental Release Measures

Personal Precaution: Avoid contact with eyes. Not suitable for internal consumption. Environmental Precautions: Use sand, soil or other suitable inhibitors to prevent diffusion or entry into sewer, drainage ditch or river. Spill and Leak Procedures: Determine whether to evacuate or isolate the area according to the local emergency plan. Follow all personal protective equipment usage recommendations listed in this material safety data sheet. If the enclosed item can be sucked up, it should be placed in a suitable container. Clean the leaked residue with a suitable adsorbent. Properly clean the leaked area, as some silicone products can cause a slippery hazard even in small amounts. Require the use of steam, solvents, or cleaning agents for final cleaning. Properly handle saturated absorbents or cleaning products, as they may also be suitable for cleaning leaked materials and items. The relevant legal provisions may apply to the leakage and release of this item, as well as to the materials and items used to clean up the leakage. You need to determine the more appropriate legal regulations.

## 7. Handling and Storage

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| **Handling** | Avoid contact and aerosol generation; use suitable ventilation and good industrial hygiene. Keep containers closed. Use clean tools and prevent contamination. |
| **Quaternium-80 concentrate / storage** | Store in dry, cool and ventilated place, recommended storage temperature 5-35 °C and humidity ≤95% Packaging: 25kg/110kg/180kgs per plastic drum. |

## 8. Exposure Controls / Personal Protection

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| **Exposure limits** | Product-specific occupational exposure limits are not established in the available grade information. Apply relevant component and local workplace limits. |
| **Engineering / hygiene** | Use ventilation or local extraction for dust/mist generation. Provide eyewash and washing facilities. Keep food and drink away from handling areas. |
| **PPE** | Use safety goggles, suitable chemical-resistant gloves and protective clothing. Select respiratory protection through workplace assessment; emergency responders may require self-contained breathing apparatus. |
| **Heating precautions** | Heating above 230 °C (445 °F) in air is reported to produce trace benzene, a carcinogen. Provide suitable ventilation and extraction during heated processing; product-specific test support is not available. |

Avoid splashes and aerosol generation.

## 9. Physical and Chemical Properties

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| **Physical state** | Liquid |
| **Appearance** | Yellowish brown translucent liquid |
| **Reported properties** | Appearance ( 25 °C ): Semi-transparent liquid. Color: Yellow brown. pH Value ( 24 °C ): 6.5-8.5. Odor: Characteristic odor. Solubility: Water soluble. Boiling Point: Not determined. Melting Point: Not determined. Flash Point: > 101 °C. Closed cup test method. Ignition Temperature: Not determined. Explosive: Not determined. Oxidation: Not determined. Vapor Pressure ( 25 °C ): Not determined. Specific Gravity: Not determined. Octanol/Water Partition Coefficient: Not determined. Molecular Weight: Not determined. |
| **Unestablished properties** | Where no variant-specific value is stated: melting/freezing point, boiling range, flash point, flammability, explosive limits, autoignition, decomposition temperature, viscosity, vapour pressure, relative density, vapour density, partition coefficient and particle characteristics are not established. |

Appearance and pH are grade-specific. Reported boiling, flash-point and density values have no supplied supporting test report or method and do not establish flammability or transport clearance.

## 10. Stability and Reactivity

Stability: This product is stable when stored and used at normal ambient temperature. Reactivity: Not available. Avoid Contact Condition: Not available. Prohibited Substance: Oxidant can cause reaction. Decomposition Product: Silicon dioxide, carbon dioxide, and trace amount of incompletely burned carbide. Aggregation Hazard: A polymerization reaction that does not cause harm.

## 11. Toxicological Information

Possible Health Effects: Refer to Section 2 Teratoxicity: No relevant data available. Mutagenicity: No relevant data available. Reproductive toxicity: No relevant data available. Carcinogenicity: No relevant data available. Other Health Hazards: No relevant data available.

## 12. Ecological Information

Environmental Impact and its Distribution: Uncertain. Environmental Impact: May have an impact on aquatic organisms, please use according to local regulations. Harm to Wastewater Treatment Plant: Uncertain.

## 13. Disposal Considerations

Product Waste Disposal Method: Dispose of waste in accordance with local regulation. Disposal Method for Packaging Waste: Dispose of waste in accordance with local regulation.

## 14. Transport Information

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| **ADR / RID** | |
| **IMDG** | |
| **IATA** | |
| **UN number** | |
| **UN proper shipping name** | |
| **Transport hazard class** | |
| **Packing group** | |
| **Environmental transport hazards** | |
| **Special precautions** | Keep packaging closed and protected against leakage, damage, heat and contamination. Confirm requirements for the actual formulation, package, route and mode before dispatch. |
| **Maritime transport in bulk** | |

## 15. Regulatory Information

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| **Regulatory compliance status** | |
| **Chemical inventory status** | |
| **Chemical safety assessment** | |
| **Intended market / use** | Professional cosmetic formulation. Assess ingredient and preservative restrictions, finished-product safety and workplace requirements for the destination market. |

## 16. Other Information

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| **Version / revision** | Version 2026 \| Revision date: 04 November 2026 \| Prepared by ZXCHEM. |
| **Scope** | This safety information applies only to the named grades and declared composition ranges. It is not a shipping clearance or a certificate of finished-product suitability. |
| **Abbreviations** | GHS: Globally Harmonized System; SDS: Safety Data Sheet; PPE: personal protective equipment; PBT/vPvB: persistent, bioaccumulative and toxic / very persistent and very bioaccumulative. |
| **Disclaimer** | Information is supplied in good faith for professional evaluation. Users must assess the intended formulation, workplace and destination requirements. Blank safety fields do not establish absence of hazard, regulatory compliance or transport exemption. |