

Glyoxal 40% Aqueous Solution

A reactive aqueous dialdehyde for industrial crosslinking in paper, textiles, leather, resins and specialty chemical formulations.

CAS No. 107-22-2	EC / EINECS No. 203-474-9	Transport Not regulated as dangerous goods
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Product Information

Glyoxal 40% is an aqueous solution of glyoxal, a highly reactive dialdehyde used where controlled crosslinking or aldehyde functionality is required. The product is fully miscible with water and is supplied for industrial formulation and synthesis use.

Reactive dialdehyde chemistry is suitable for hydroxyl, amine and amide functional systems. Three formaldehyde limits are available by grade; select the required limit and confirm batch results by certificate of analysis.

Specifications

Parameter	Specification
Glyoxal content	40 ± 0.5 %
Appearance	Colorless transparent liquid
Color (Pt-Co / APHA)	≤20
Acidity (as CH ₃ COOH)	≤0.2 %
Formaldehyde content	≤100 / ≤500 / ≤1,000 (selected grade) ppm

Product Series

Formaldehyde ≤100 ppm	Glyoxal content 40 ± 0.5%. Select this option when the purchase specification requires a formaldehyde limit of 100 ppm.
Formaldehyde ≤500 ppm	Glyoxal content 40 ± 0.5%. An alternative grade with a formaldehyde limit of 500 ppm.
Formaldehyde ≤1,000 ppm	Glyoxal content 40 ± 0.5%. An alternative grade with a formaldehyde limit of 1,000 ppm.

Typical Properties

Property	Typical Value
Chemical identity	Glyoxal 40% aqueous solution
Synonyms	Ethanedial; Oxalaldehyde
Molecular formula (glyoxal component)	C ₂ H ₂ O ₂
Molecular weight (glyoxal component)	58.04 g/mol
Appearance (typical)	Clear to pale-yellow liquid
Odor	Mild aldehydic odor
pH at 25 C (typical)	2.0 - 3.5
Density at 20 C (typical)	1.26 - 1.30 g/cm ³
Solubility	Completely miscible with water
Stability	Stable under recommended storage; avoid strong oxidizers and alkalis

Applications

Paper & Packaging: Crosslinking ingredient in compatible paper-coating and polymer systems.

Textiles & Leather: Reactive ingredient for textile finishing and leather-processing chemistry.

Coatings & Resins: Crosslinking agent or chemical intermediate in compatible resin systems.

Oilfield Formulations: Ingredient for selected crosslinking and hydrogen sulfide scavenging formulations. Evaluate suitability under actual process conditions.

Packaging / Storage

Item	Information
Packaging	250 kg net plastic drums; 1,250 kg IBC totes; ISO tanks.
Storage	Store at 5–30°C in tightly closed containers, in a cool, dry, well-ventilated area. Protect from freezing, heat and direct sunlight.
Packaging integrity	Keep the original container tightly closed. Protect the solution from freezing, heat and direct sunlight during storage.
Handling	Avoid breathing mist and contact with skin or eyes. Use suitable protective gloves and eye protection, and work with adequate ventilation.

Company Contact

Supplier	Hainan Zhongxin Chemical Co., Ltd. (ZXCHEM)
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