



(3-Glycidoxypropyl)trimethoxysilane

AB111152 | CAS 2530-83-8

1. Product Identification

Chemical Name: (3-Glycidoxypropyl)trimethoxysilane; 98%

Synonyms: 3-(Trimethoxysilyl)propyl glycidyl ether, (γ -Glycidoxypropyl)trimethoxysilane

Molecular Formula: C₉H₂₀O₅Si

Molar Mass: 236,38 g/mol

2. Physical and Chemical Properties

Purity: 98%

Appearance: Colorless, clear liquid

Odor: Characteristic

Boiling Point: approx. 120 °C/2 mm

Density: approx. 1.07 g/cm³ at 25 °C

Refractive Index: 1.429 at 20 °C

Solubility: Soluble in organic solvents; hydrolyzes in water releasing methanol

The data represent typical values (no product specification)

3. Applications

- Modification of inorganic surfaces like glass, metals and ceramics
- Adhesion promoter in waterborne systems
- Coupling agent for unsaturated polyester– fiberglass composites, polysulfide & polyurethane
- Raw material for the synthesis of polysiloxane networks

4. Reactivity

Trimethoxysilyl-groups: Hydrolyze in contact with moisture, releasing methanol and forming reactive Silanol-groups which bond to inorganic surfaces or interact as crosslinker. Catalysts like acids or Lewis acids accelerate the hydrolyzation reaction.

Epoxy-group: Ring-opening reactions with nucleophiles such as amines, acids, alcohols, isocyanates and thiols, homopolymerisation

5. Storage and Handling

Storage Conditions: Store in a cool, dry, and tightly sealed container. Protect from moisture and direct sunlight.

Avoid direct contact with moisture to prevent hydrolysis.

Methanol release caution; it is recommended to work in well-ventilated spaces.

6. Available Quantities

AB111152 is available in following quantities:

- > Shop AB111152 | CAS 2530-83-8

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets (MSDS). They are available on the abcr website

- > https://abcr.com/de_en/ab111152