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- 1 -

SiSiB[®] PC3200

gamma-Glycidoxypropyltriethoxysilane



Introduction

PC3200 is a clear colorless, low-odor liquid. PC3200 may be used as an adhesion promoter (coupling agent) for organic/inorganic interfaces, as a surface modifier (e.g. regulating surface polarity) or as a crosslinking agent (moisture-curing of polymers). When used as coupling agent, it generally reduces the sensitivity of the products' mechanical and electrical properties to heat and/or moisture.

Typical Physical Properties

Chemical Name	gamma-Glycidoxypropyltriethoxysilane
Alternate Name:	3-(2,3-Epoxypropyloxy)propyltriethoxysilane
CAS No.	2602-34-8
EINECS No.	220-011-6
Empirical Formula	C ₁₂ H ₂₆ O ₅ Si
Molecular Weight	278.4
Boiling Point	124°C [3mmHg]
Flash Point	110°C
Color and Appearance	Colorless clear liquid.
Density 25/25°C	1.004
Refractive Index	1.425 [25°C]
Min. Purity	Min 97.0%;

Solubility and reactivity

PC3200 is a sparingly miscible with neutral water. In acidified water, hydrolysis to the soluble silanol occurs (PH<4). PC3200 is miscible with practically all organic compounds

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- 2 -

and enters into the typical reactions of an organic epoxide with, e.g. acids, amines and alcohols. Alkaline or acid catalysts might be advisable for the desired reaction. Polymerization via the epoxide groups cannot be ruled out completely under extreme conditions.

Storage stability

PC3200 has a shelf life of at least 12 months, if stroed in a dry place in tightly closed original containers at 25 deg.C.