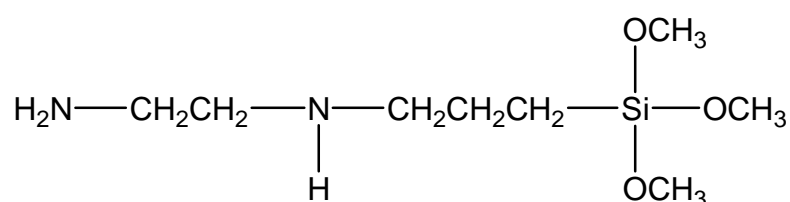


SiSiB[®] PC1200

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N-beta-(aminoethyl)-gamma-aminopropyl-trimethoxysilane

Alternate name: N-[3-(Trimethoxysilyl)propyl]ethylenediamine



Introduction

PC1200 (equal to A-1120, GF 91, KBM603) is a clear, colorless, strongly alkaline liquid with smell being very sensitive to hydrolysis. The chloride content ranges in the lower ppm-level.

PC1200 is used as adhesion promoter at organic/inorganic interfaces, for modification of surfaces (corrosion prevention, component of primers) or silicone-polymers or as crosslinker (moisture crosslinking of polymers). The application as “coupling agent” leads in general to an improvement of mechanical and electrical product properties above all under exposure to heat and/or moisture.

Applications

- Excellent integral adhesion promoter for Epoxy, SPURsm, MS Polymer[®], RTV Silicone and PVC-based sealant.
- Useful component in primer systems for hybrid, SPUR, MS Polymer and polyurethane sealant.
- Additive to phenolic binders for fibrous insulation.
- Additive in phenolic and epoxy moulding compounds.

SiSiB[®] PC1200

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Typical Physical Properties

Chemical Name	N- <i>beta</i> -(Aminoethyl)- <i>gamma</i> -aminopropyl-trimethoxysilane
CAS No.	1760-24-3
EINECS No.	212-164-2
Formula	C ₈ H ₂₂ N ₂ O ₃ Si
Molecular Weight	222.4
Refractive Index	1.446 [25°C]
Density _{25/25°C}	1.025
Viscosity _{25°C}	6mm ² /s
Boiling Point	259°C [760mmHg]
Min. Purity	99.0%

Solubility

PC1200 is unlimited miscible with water with spontaneous hydrolysis occurring.

Caution: Due to solution enthalpies mixing water is exothermic. Always stir PC1200 into water. With alcohols miscibility is, in general, possible with self-catalyzed exchange of the alkoxy-groups. In aliphatic and aromatic hydrocarbons and (moisture-free!) ethers or esters PC1200 is easily soluble at differing levels. With ketones and various halogenated compounds a slow reaction can occur. Towards acids, epoxides or isocyanates PC1200 shows typical amine function. Some nonferrous metals can discolor upon contact.