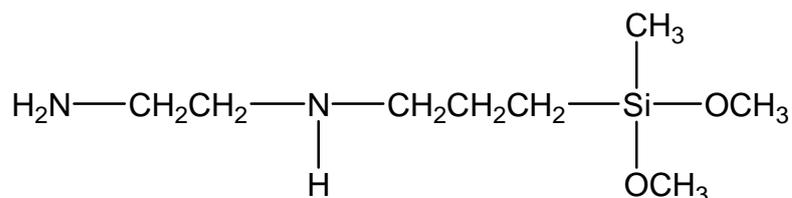


## SiSiB<sup>®</sup> PC1220

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



### Introduction

PC1220 is a colorless, strongly alkaline liquid with amine smell being very sensitive to hydrolysis. PC1220 is a diamino-functional silane capable of providing good adhesion and superior elongation and flexibility at the polymer-substrate interface. It is used to promote adhesion between glass, mineral and metal surfaces - reinforcements, fillers and substrates - and resins that react with amino groups in systems such as PVC plastisol, polyurethane, or epoxy-based adhesives and sealant, or in phenolic and epoxy molding compounds. Its reduced alkoxy functionality might also be useful in waterborne systems such as latex coatings, adhesives and sealants, providing lower reactivity and therefore higher stability in the aqueous environment.

### Applications

- Provides superior elongation, flexibility and spreading at the interface as a coupling agent.
- Improves adhesion between glass, mineral and metal surfaces and amino-reactive resins.
- Improves adhesion, while maintaining good shelf stability as an additive in waterborne systems.

## SiSiB<sup>®</sup> PC1220

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### Typical Physical Properties

Chemical Name	N-beta-(Aminoethyl)-gamma-aminopropyl methyldimethoxysilane
CAS No.	3069-29-2
EINECS No.	221-336-3
Formula	C <sub>8</sub> H <sub>22</sub> N <sub>2</sub> O <sub>2</sub> Si
Molecular Weight	206.4
Boiling Point	265°C [760mmHg]
Refractive Index	1.445 [25°C]
Density <sub>25/25°C</sub>	0.970-0.980
Viscosity <sub>25°C</sub>	4.6mm <sup>2</sup> /s
Flash point	93°C
Ignition temperature	290°C
Min. Purity	98.0%

### Solubility

PC1220 is easily soluble in water with spontaneous hydrolysis occurring.

**Caution:** Due to solution enthalpies mixing water is exothermic. Always stir PC1220 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 PC1220 is easily soluble at differing levels. With ketones and various halogenated compounds a slow reaction can occur. Towards acids, epoxides or isocyanates PC1220 shows typical amine function. Some nonferrous metals can discolor upon contact.