



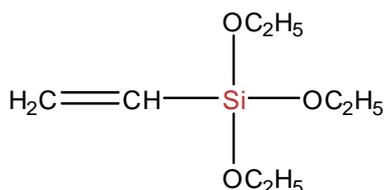
# SiSiB® PC6120 SILANE

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## CHEMICAL NAME

Vinyltriethoxysilane

## CHEMICAL STRUCTURE



## INTRODUCTION

SiSiB® PC6120, vinyltriethoxysilane, is a vinyl-functional silane that may be used to improve the bond between glass fiber or mineral fillers and resins that are reactive towards the vinyl group. It is also employed to functionalize resins via free radical mechanisms - copolymerization or grafting - and to modify surfaces.

## TYPICAL PHYSICAL PROPERTIES

CAS No.	78-08-0
EINECS No.	201-081-7
Formula	C <sub>8</sub> H <sub>18</sub> O <sub>3</sub> Si
Molecular Weight	190.4
Boiling Point	160°C [760mmHg]
Flash Point	44°C
Color and Appearance	Colorless transparent liquid
Density <sub>25/25°C</sub>	0.904-0.908
Refractive Index	1.3965 [25°C]
Purity:	Min 99.0%

**Reactivity:** In the presence of moisture the ethoxy groups of SiSiB® PC6120 hydrolyze to produce ethanol and reactive silanol (Si-OH) groups which can bond to a variety of inorganic substrates or react with each other to form siloxane bonds (Si-O-Si). The

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organophilic vinyl end of SiSiB® PC6120 can also react with a suitable polymer (activated by peroxide or radiation).

## APPLICATIONS

SiSiB® PC6120 is suitable for the preparation of moisture-curing polymers, e.g. polyethylene. Silane crosslinked polyethylene is widely used as cable isolation, and sheathing mainly in low voltage applications as well as for hot water/sanitary pipes and underfloor heating.

SiSiB® PC6120 is used as a co-monomer for the preparation of different polymers such as polyethylene or acrylics. Those polymers show an improved adhesion to inorganic surfaces and they can also be crosslinked with moisture.

SiSiB® PC6120 is used as an efficient adhesion promoter for various mineral-filled polymers, improving mechanical and electrical properties especially after exposure to moisture.

SiSiB® PC6120 is used to improve the compatibility of fillers with polymers, leading to a better dispersibility, reduced melt viscosity and easier processing of filled plastics.

SiSiB® PC6120 is used to pretreat of glass, metals, or ceramic surfaces, improve the adhesion of coatings on these surfaces and corrosion resistance.

SiSiB® PC6120 is used as moisture scavenger. SiSiB® PC6120 reacts rapidly with water. This effect is used widely in sealants.

## PACKING AND STORAGE

SiSiB® PC6120 is supplied in 180Kg steel drum or 900Kg IBC container.

In the unopened original container SiSiB® PC6120 has a shelf life of one year in a dry and cool place.

## NOTES

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

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## SiSiB<sup>®</sup> PC6120 SILANE

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Please send all technical questions concerning quality and product safety to: [silanes@SiSiB.com](mailto:silanes@SiSiB.com).

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