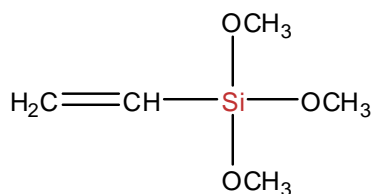


SiSiB[®] PC6110

Vinyltrimethoxysilane

CHEMICAL STRUCTURE



INTRODUCTION

SiSiB[®] PC6110, vinyltrimethoxysilane, is used as a polymer modifier via grafting reactions. The resulting pendant trimethoxysilyl groups can function as moisture-activated crosslinking sites. The Silane grafted polymer is processed as a thermoplastic and crosslinking occurs after fabrication of the finished article upon exposure to moisture.

TYPICAL PHYSICAL PROPERTIES

CAS No.	2768-02-7
EINECS No.	220-449-8
Formula	C ₅ H ₁₂ O ₃ Si
Molecular Weight	148.2
Boiling Point	122°C [760mmHg]
Flash Point	28°C
Color and Appearance	Colorless transparent liquid
Density _{25/25°C}	0.960-0.970
Refractive Index	1.3905 [25°C]
Min. Purity	99.0%

Reactivity: In the presence of moisture the methoxy groups of SiSiB[®] PC6110 hydrolyze to produce methanol 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 organophilic vinyl end of SiSiB[®] PC6110 can also react with a suitable polymer (activated by peroxide or radiation).

APPLICATIONS

SiSiB[®] PC6110 is suitable for the preparation of moisture-curing polymers, e.g.

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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[®] PC6110 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[®] PC6110 is used as an efficient adhesion promoter for various mineral-filled polymers, improving mechanical and electrical properties especially after exposure to moisture.

SiSiB[®] PC6110 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[®] PC6110 is used to pretreat of glass, metals, or ceramic surfaces, improve the adhesion of coatings on these surfaces and corrosion resistance.

SiSiB[®] PC6110 is used as moisture scavenger. SiSiB[®] PC6110 reacts rapidly with water. This effect is used widely in sealants.

PACKING AND STORAGE

SiSiB[®] PC6110 is supplied in 190Kg steel drum or 950Kg IBC container.

In the unopened original container SiSiB[®] PC6110 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.

We specifically disclaim any other express or implied warranty of fitness for a particular purpose or merchantability. We disclaim liability for any incidental or consequential damages.

Please send all technical questions concerning quality and product safety to: silanes@SiSiB.com.

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