



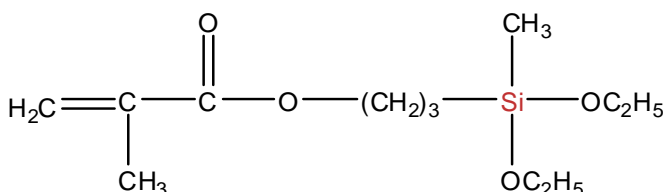
SiSiB[®] PC4400 SILANE

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CHEMICAL NAME

3-methacryloxypropylmethyl-diethoxysilane

CHEMICAL STRUCTURE



INTRODUCTION

SiSiB[®] PC4400 is a methacryl-functional silane, it is a clear, light and heat sensitive liquid with a faintly sweet odour.

SiSiB[®] PC4400 is used as adhesion promoter at organic/inorganic interfaces, as surface modifier (e.g. imparting water repellency, organophilic surface adjustment) or as crosslinking of polymers). It is used as a coupling agent to improve the physical and electrical properties of glass-reinforced and mineral-filled thermosetting resins under exposure to heat and/or moisture. It is typically employed as a blend additive in resin systems that cure via a free radical mechanism (e.g. polyester, acrylic) and in filled or reinforced thermoplastic polymers, including polyolefins and polyurethanes. It is also used to functionalize resins via radical initiated processes - copolymerization or grafting - and to modify surfaces.

TYPICAL PHYSICAL PROPERTIES

CAS No.	65100-04-1
EINECS No.	N/A
Formula	C ₁₂ H ₂₄ O ₄ Si
Molecular Weight	260.4
Boiling Point	265°C [760mmHg]
Flash Point	136°C
Color and Appearance	Clear to straw liquid with mild odor

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SiSiB® PC4400 SILANE

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Density <small>25/25°C</small>	0.96
Refractive Index	1.432[25°C]
Purity:	98.0% by GC

Solubility: SiSiB® PC4400 is soluble in methanol, ethanol, isopropanol, acetone, benzene, toluene, and xylene. After hydrolysis, it is soluble in water with adequate stirring if the pH is adjusted to 4.0. Hydrolysis releases methanol.

SiSiB® PC4400 shows copolymerization or grafting reactions when catalyzed by (organic) initiator systems, e.g. peroxides or by radiation (e.g. UV).

APPLICATIONS

SiSiB® PC4400 can improve strength as glass fiber size composite in reinforced polyester composites.

SiSiB® PC4400 can enhance initial and wet strength of reinforced polyester resin composites.

SiSiB® PC4400 can enhance the wet electrical properties of many mineral-filled and reinforced composites.

SiSiB® PC4400 crosslinked acrylic type resins can improve adhesion and durability of adhesives and coatings.

PACKING AND STORAGE

SiSiB® PC4400 is supplied in 25Kg plastic drum, 200Kg steel drum or 1000Kg IBC container.

In the unopened original container SiSiB® PC4400 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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Please send all technical questions concerning quality and product safety to: silanes@SiSiB.com.

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