

# SiSiB® PC4200 SILANE

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## CHEMICAL NAME

3-methacryloxypropyltriethoxysilane

## CHEMICAL STRUCTURE

## INTRODUCTION

SiSiB® PC4200 is a methacryl-functional silane; it is a clear, light and heat sensitive liquid with a faintly sweet odour.

SiSiB® PC4200 is used as adhesion promoter at organic/inorgainc interfaces, as surface modifier. 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.	21142-29-0
EINECS No.	244-239-0
Formula	C <sub>13</sub> H <sub>26</sub> O <sub>5</sub> Si
Molecular Weight	290.43
Boiling Point	129°C [760mmHg]
Flash Point	128°C
Color and Appearance	Clear to straw liquid with mild odor
Density <sub>25/25°C</sub>	0.99
Refractive Index	1.427[25°C]

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# SiSiB® PC4200 SILANE

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Purity:

98.0% by GC

**Solubility:** SiSiB® PC4200 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.

### **A**PPLICATIONS

SiSiB® PC4200 is mainly used in unsaturated polyester composite material to improve

SiSiB® PC4200 can improve the wet mechanical property and electric property of glass fiber reinforced composite material.

In wire and cable industry, when be used to treat EPDM system, which is stuffed by pottery clay and crosslinked by peroxide, SiSiB® PC4200 can improve consumption factor and specific inductance captance.

The polymers, polymerized by SiSiB® PC4200 and vinyl acetate and acrylic acid or methyl acrylic acid monomer, are widely used in coatings, adhesives and sealing agents with which provide excellent adhesion and durability.

#### PACKING AND STORAGE

SiSiB® PC4200 is supplied in 25Kg plastic drum, 200Kg steel drum or 1000Kg IBC container.

In the unopened original container SiSiB® PC4200 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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