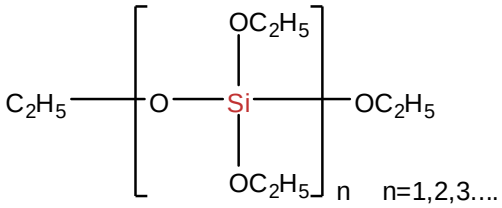
SiSiB® PC5425 SILANE

Chemical Name

Ethyl Polysilicate 50, Ethyl Silicate 50

Chemical Structure



Introduction

SiSiB® PC5425 is a hydrolyzed and oligomerized form of ethyl silicate. It is a mixture of monomers, dimers, trimers and cyclic polysiloxanes. SiSiB® PC5425 is a transparent liquid containing 50% silica (SiO_2) by mass, but in practice, in addition to chain condensates, it also contains branch-shaped and ring-shaped condensates.

Typical Physical Properties

CAS No.	11099-06-2 or 68412-37-3
EINECS No.	234-324-0 or 270-184-7
Formula	N/A
Molecular Weight	N/A
Boiling Point	84°C [760mmHg]
Flash Point	29°C
Color and Appearance	Colorless to straw clear liquid.
Density $_{25/25°C}$	1.12
Viscosity $_{(20°C)}$	9 cps
SiO_2 content	45.0~47.0%

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Applications

SiSiB® PC5425 is used to deposit silicic acid formed as a result of complete hydrolysis. The resulting silicic acid bonds well to many inorganic substrates, such as ceramic, fillers, glass, metal, pigments and synthetic fibers. The deposition of a thin SiO2 layer improves the chemical and the thermal stability and mechanical properties.

SiSiB® PC5425 may be used as a binder in zinc-rich (corrosion resistant) coating.

SiSiB® PC5425 may be used as a starting material for sol-gel process.

SiSiB® PC5425 may be used as a crosslinker component in cold curing silicone rubber systems.

SiSiB® PC5425 may be used as a hardening component in dentistry for impression materials and as binder for embedding material.

SiSiB® PC5425 may be used as a binder in precision foundry industry.

Packing and Storage

SiSiB® PC5425 is supplied in 210Kg steel drum or 1050Kg IBC container.

In the unopened original container SiSiB® PC5425 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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