



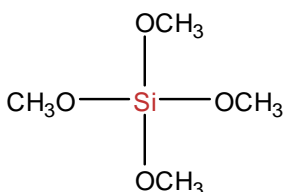
# SiSiB® PC5410 SILANE

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## CHEMICAL NAME

Tetramethoxysilane (TMOS), Tetramethyl orthosilicate

## CHEMICAL STRUCTURE



## INTRODUCTION

SiSiB® PC5410, the methyl ester of orthosilicic acid, is a colorless or light yellowish, low-viscosity liquid with an SiO<sub>2</sub> content of 39.5%.

## TYPICAL PHYSICAL PROPERTIES

CAS No.	681-84-5
EINECS No.	211-656-4
Formula	C <sub>4</sub> H <sub>12</sub> O <sub>4</sub> Si
Molecular Weight	152.22
Boiling Point	122°C [760mmHg]
Flash Point	26°C
Color and Appearance	Colorless transparent liquid
Density <sub>25/25°C</sub>	1.032
Refractive Index	1.3688 [20°C]
Purity:	Min 99.0%

## APPLICATIONS

SiSiB® PC5410 can be used as an inorganic binder for refractory fillers and pigments, like precision investment castings.

**Power Chemical**  
ISO9001 ISO14001 certified

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# SiSiB<sup>®</sup> PC5410 SILANE

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SiSiB<sup>®</sup> PC5410 can be used as a second backup casting coating. It cures faster than colloidal silica system.

SiSiB<sup>®</sup> PC5410 can be hydrolyzed to form silicon dioxide (silica).

SiSiB<sup>®</sup> PC5410 can be used as a binder in zinc-rich (corrosion resistant) coating.

SiSiB<sup>®</sup> PC5410 can be used as a starting material for sol-gel process.

SiSiB<sup>®</sup> PC5410 can be used as a crosslinking agent for silicone sealant.

SiSiB<sup>®</sup> PC5410 can be used as a drying agent in sealing compositions.

SiSiB<sup>®</sup> PC5410 can be used as a chemical intermediate.

Compared to ethyl silicate, SiSiB<sup>®</sup> PC5411 has a higher silica concentration which brings cost advantages, but methyl alcohol is generated in the usage environment, so measures are necessary to counteract this.

## PACKING AND STORAGE

SiSiB<sup>®</sup> PC5410 is supplied in 200Kg steel drum.

In the unopened original container SiSiB<sup>®</sup> PC5410 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](mailto:silanes@SiSiB.com).

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