SiSiB[®] PC5881

Octadecyltrimethoxysilane

CHEMICAL STRUCTURE

$$\begin{array}{c|c}
 & OCH_3 \\
 & & \\
 & -C_{18}H_{37} & --Si & --OCH_3 \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & & \\
 & & \\$$

INTRODUCTION

SiSiB® PC5881 is a long-chain alkyl silane, commonly called OTMS. It is easy to be dissolved in ordinary organic solvent, e.g. hydrocarbon, ether, ketone, etc. It is easy to be hydrolyzed and condensed, generate polysiloxane.

SiSiB® PC5881 is used for preparing hydrophobic coatings and self-assembled monolayers. It is sensitive toward water, irreversibly degrading to a siloxane polymer. It places a C18H39SiO3 "cap" on oxide surfaces. The formation of OTMS monolayers is used for converting hydrophilic surfaces to hydrophobic surfaces, e.g. for use in certain areas of nanotechnology and analytical chemistry.

TYPICAL PHYSICAL PROPERTIES

CAS No.	3069-42-9
EINECS No.	221-339-2
Formula	$C_{21}H_{46}O_3Si$
Molecular Weight	374.68
Boiling Point	150°C [2mmHg]
Flash Point	140°C
Color and Appearance	Colorless transparent liquid
Density _{25/25°C}	0.885
Refractive Index	1.4390[25°C]
Purity	95.0%

APPLICATIONS

Coupling Agent

Mainly be used to deal with inorganic materials, e.g. glass, silica, Al₂O₃, Kaolin, pottery

SINOPCC GROUP

AddSil, CoatSil, Kolark, PowSil, SinoSil, SiSiB, WinSil: Trademark of SINOPCC Group Limited or its affiliated. © 2018 SINOPCC Group Limited. All rights reserved. For further information, please see www.SiSiB.com.



and porcelain, mica, SiC, talcum powder etc., in order to improve the property of blending with organic matter and water-proof, enhancing the mechanical property of the products.

Fog-proof Preparation of Glass

- a) Protect blank glass and coated glass (optical antireflex coating, vacuum antireflex coating, reflective coating)
- b) Protect optical parts or precision instrument with graduations and metal frames.

Protect Historical Relics or Other Products from Water

Protect historical relics (esp. outdoor historical relics) from corrosion, freeze or efflorescence.

PACKING AND STORAGE

SiSiB® PC5881 is supplied in 20Kg pail or 180Kg steel drum.

In the unopened original container SiSiB® PC5881 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.

SINOPCC GROUP

AddSil, CoatSil, Kolark, PowSil, SinoSil, SiSiB, WinSil: Trademark of SINOPCC Group Limited or its affiliated. © 2018 SINOPCC Group Limited. All rights reserved. For further information, please see www.SiSiB.com.