

SILSOURCE™ SS-5020

OCTADECYLTRIMETHOXYSILANE

PRODUCT DESCRIPTION

SS-5020, Octadecyltrimethoxysilane is a long-chain organosilane compound widely used as a surface treatment agent and hydrophobic additive.

Its functional silane group can chemically bond with surfaces, while the long octadecyl chain imparts excellent water repellency and lubrication properties.

TYPICAL PRODUCT DATA*

Property	Unit	Typical Value
CAS#	-	3277-26-7
Molecular Weight	g/mol	374.68
Formula		C ₂₁ H ₄₆ O ₃ Si
Appearance	-	Colorless clear liquid
Boiling Point	°C	150
Flash Point	°C	140
Refractive Index	-	1.439
Density	g/cm ³	0.885
Purity	%	≥95%

* These values are not intended to be used as specifications but as suggested characteristics

PACKAGING

The size of the available packages can be checked with Sales Department. SS-5020 is typically supplied in 180kg steel drums.

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ SAFETY DATA SHEET AND CONTAINER LABELS FOR SAFE USE, PHYSICAL, ENVIRONMENTAL, AND HEALTH HAZARD INFORMATION.

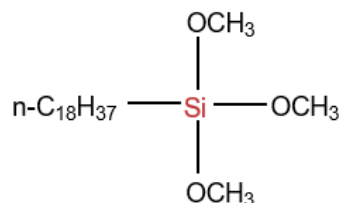
LIMITATIONS: Not intended for human injection. This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

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VERSION: 1 Last updated: 24 April 2024

TECHNICAL DATA SHEET



TYPICAL FEATURES AND APPLICATIONS

SS-5020 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.

INFORMATION FOR USE

As a Coupling Agent SS-5020 is mainly used to deal with inorganic materials, e.g. glass, silica, Al₂O₃, Kaolin, pottery, 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.

As a fog-proof Preparation of Glass, SS-5020 protects blank glass and coated glass (optical antireflect coating, vacuum antireflect coating, reflective coating). It also protects optical parts or precision instrument with graduations and metal frames.

SHELF LIFE AND STORAGE

In the unopened original container SS-5020 has a shelf life of one year in a dry and cool place.