

PROSILANE™ SC-5131

METHYLTRIMETHOXYSILANE

PRODUCT DESCRIPTION

SC-5131, Methyltrimethoxysilane (MTMS) is an organosilane compound that features a methyl group and three methoxy groups bonded to silicon. It is widely used as a crosslinking agent, adhesion promoter, and surface modifier. MTMS reacts with moisture to form silanol groups, which can further polymerize to create siloxane networks.

TYPICAL PRODUCT DATA*

Property	Unit	Typical Value
CAS#	-	1185-55-3
Molecular Weight	g/mol	136.3
Formula		C ₄ H ₁₂ O ₃ Si
Appearance	-	Colorless clear liquid
Boiling Point	°C	102
Flash Point	°C	9
Refractive Index	-	1.369
Density	g/cm ³	0.95
Purity	%	≥99.5%

* 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. SC-5131 is typically supplied in 190kg 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.

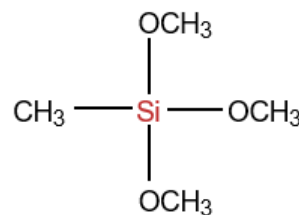
LIMITATIONS: Not intended for human injection. This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

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TECHNICAL DATA SHEET



TYPICAL FEATURES AND APPLICATIONS

SC-5131 is highly miscible with standard organic solvents, such as alcohols, hydrocarbons and acetone.

SC-5131 is practically insoluble in neutral water and reacts only slowly to form silanols and higher condensation products. Addition of a hydrolytic catalyst (inorganic/organic acids, ammonia or amines) accelerates the hydrolysis substantially.

SC-5131 is used mainly to render a wide range of surfaces and materials water repellent (e.g. mineral fillers, pigments, glass, cardboard). It may be used pure or in solution to treat fillers, using suitable mixing equipment. It may be necessary to first pre-treat the substrate with water and/or a catalyst.

INFORMATION FOR USE

SC-5131, an alkylalkoxysilane is an important component in sol-gel system. It is a colorless liquid. It hydrolyzes slowly in the presence of moisture (methanol is released) to form reactive silanols. These react further to produce oligosiloxanes and then poly-siloxanes

SC-5131 is also used in the production of silicone resins and condensation-curing silicone rubber.

SC-5131 is used as an important component in sol-gel systems.

SHELF LIFE AND STORAGE

In the unopened original container SC-5131 has a shelf life of one year in a dry and cool place.