

PROSILANE™ SC-5410HP

TETRAMETHOXYSILANE [PURITY 99.5%]

PRODUCT DESCRIPTION

SC-5410HP, Tetramethoxysilane (TMOS) is a high purity (99.5%), colorless, highly volatile liquid with a sweet alcohol-like odor. Is a key precursor in the sol-gel process. TMOS hydrolyzes in the presence of water to produce silica (SiO₂) and methanol, making it a versatile chemical in materials science, particularly in the synthesis of silica-based materials.

TYPICAL PRODUCT DATA*

Property	Unit	Typical Value
CAS#	-	681-84-5
Molecular Weight	g/mol	152.22
Formula		C ₄ H ₁₀ O ₄ Si
Appearance	-	Colorless clear liquid
Boiling Point	°C	122
Flash Point	°C	26
Refractive Index	-	1.369
Density	g/cm ³	1.032
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-5410HP is typically supplied in 200kg 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.

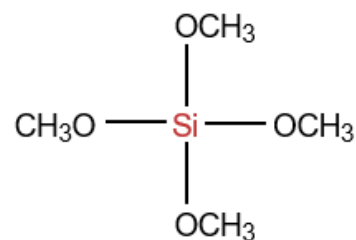
LIMITATIONS: Not intended for human injection. This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

Limited Warranty: Silsource Inc. warrants to Buyer that for a period of 12 months from the date of manufacture of the products, such products will materially conform to Silsource Inc.'s specifications in effect as of the date of manufacture. This warranty does not apply where the products have (a) been subjected to abuse, misuse, neglect, negligence, accident, improper testing, improper installation, improper storage, improper handling, abnormal physical stress, abnormal environmental conditions, or use contrary to any instructions issued by Silsource Inc.; (b) been reconstructed, repaired, or altered by persons other than Silsource Inc. or its authorized representatives; or (c) been used with any third-party product or hardware that has not been previously approved in writing by Silsource Inc. Buyer's exclusive remedy for breach of the limited warranty shall be a refund of the purchase price or replacement of the product, at Silsource Inc.'s sole discretion.

Disclaimer: EXCEPT FOR THE EXPRESS LIMITED WARRANTY SET OUT ABOVE, SILSOURCE INC. MAKES NO WARRANTY WHATSOEVER WITH RESPECT TO THE GOODS, INCLUDING ANY (A) WARRANTY OR CONDITION OF MERCHANTABILITY; (B) WARRANTY OR CONDITION OF FITNESS FOR A PARTICULAR PURPOSE; (C) WARRANTY OR CONDITION OF TITLE; OR (D) WARRANTY AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OF A THIRD PARTY, WHETHER EXPRESS OR IMPLIED AND WHETHER ARISING BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE, OR OTHERWISE. BUYER ACKNOWLEDGES THAT IT HAS NOT RELIED UPON ANY REPRESENTATION, CONDITION, OR WARRANTY MADE BY SILSOURCE INC., OR ANY OTHER PERSON ON SILSOURCE INC.'S BEHALF, EXCEPT AS SPECIFICALLY PROVIDED ABOVE.

VERSION: 1 Last updated: 24 April 2024

TECHNICAL DATA SHEET



TYPICAL FEATURES AND APPLICATIONS

SC-5410HP can be used as an inorganic binder for refractory fillers and pigments, like precision investment castings.

SC-5410HP can be used as a second backup casting coating. It cures faster than colloidal silica system.

SC-5410HP can be hydrolyzed to form silicon dioxide (silica).

SC-5410HP can be used as a binder in zinc-rich (corrosion resistant) coating.

SC-5410HP can be used as a starting material for sol-gel process.

INFORMATION FOR USE

SC-5410P can be used as a crosslinking agent for silicone sealant.

SC-5410HP can be used as a drying agent in sealing compositions.

SC-5410HP can be used as a chemical intermediate.

SHELF LIFE AND STORAGE

In the unopened original container SC-5410HP has a shelf life of one year in a dry and cool place.