

# Fluorolink® S10

## Perfluoropolyether

Fluorolink® S10 is a triethoxysilane terminated, bifunctional PFPE designed to be used as a surface treatment primarily for glass, siliceous surfaces, metals, and in general any substrate having –OH groups available on the surface.

A thin layer of Fluorolink® S10 is able to impart outstanding water and oil repellence, friction reduction and antisticking properties to the treated surface.

Additional benefits of Fluorolink® S10 include low refractive index, good resistance to weathering, solvents and abrasion.

Properties	Typical Value	Units	Test Method
Functional groups	Triethoxysilane		
Kinematic viscosity at 20 °C	173	cSt	
Specific gravity at 20 °C	1.51	g/ml	
Solubility in H <sub>2</sub> O at 20 °C	Insoluble		
Solubility in Isopropyl alcohol at 20 °C	1 – 10	% w/w	
Appearance	Pale yellow liquid		

### Formulation

Fluorolink® S10 has to be applied from a solvent-based solution containing water that participates to the chemical reactions involved in the crosslinking.

It is recommended to formulate the Fluorolink® S10 as follows:

- 0.1 % w/w of Fluorolink® S10
- 0.4 % w/w of H<sub>2</sub>O (4:1 ratio H<sub>2</sub>O/Fluorolink® S10)
- 0.1 % w/w of acetic acid or HCl 10 %
- 99.4 % w/w of Isopropyl alcohol

Shelf-life of this formulation = 2–3 days

### How to use

Dilute Fluorolink® S10 in Isopropyl alcohol to the concentration of use (0.1–0.2 % w/w is recommended), then add the right amount of water and finally the acid catalyst. The solution could turn slightly cloudy, but this will not affect the final performance.

Wait 30 min. before applying in order to allow the hydrolysis of the triethoxysilane end groups to reach completion.

The formulation can be applied by dipping, spray, roll or spin coating; after the application cure at T = 100 °C for 15 min + T = 150 °C for 15 min.

[www.solvay.com](http://www.solvay.com)

Revised: 07/10/2013

[SpecialtyPolymers.EMEA@solvay.com](mailto:SpecialtyPolymers.EMEA@solvay.com) | Europe, Middle East and Africa

[SpecialtyPolymers.Americas@solvay.com](mailto:SpecialtyPolymers.Americas@solvay.com) | Americas

[SpecialtyPolymers.Asia@solvay.com](mailto:SpecialtyPolymers.Asia@solvay.com) | Asia Pacific

Material Safety Data Sheets (MSDS) are available by emailing us or contacting your sales representative. Always consult the appropriate MSDS before using any of our products. Neither Solvay Specialty Polymers nor any of its affiliates makes any warranty, express or implied, including merchantability or fitness for use, or accepts any liability in connection with this product, related information or its use. Some applications of which Solvay's products may be proposed to be used are regulated or restricted by applicable laws and regulations or by national or international standards and in some cases by Solvay's recommendation, including applications of food/feed, water treatment, medical, pharmaceuticals, and personal care. Only products designated as part of the Solviva® family of biomaterials may be considered as candidates for use in implantable medical devices. The user alone must finally determine suitability of any information or products for any contemplated use in compliance with applicable law, the manner of use and whether any patents are infringed. The information and the products are for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right. All trademarks and registered trademarks are property of the companies that comprise Solvay Group or their respective owners.