



CHEMGUARD S-550

High Performance Nonionic Fluorosurfactant

CHEMGUARD, INC. 204 South 6th Ave. Mansfield, Texas 76063 USA • 817-473-9964 • Fax: 817-473-0550 • www.chemguard.com

Product Description

CHEMGUARD S-550 is a short-chain perfluoro-based ethoxylated nonionic fluorosurfactant. It provides surface tensions as low as 20 dynes/cm in water at low concentrations and is also surface active in many solvents. This product has excellent dynamic surface tension properties, allowing rapid attainment of low equilibrium surface tensions. Due to its exceptional surface activity, Chemguard S-550 imparts excellent wetting; spreading, leveling and flow control properties to various types of water-based as well as solvent based coating formulations.

Chemguard Fluorosurfactants

- Non-flammable
- Effective in solvent based coatings
- Effective at low concentrations of 50-1000 ppm, depending on the application
- Excellent replacement for **FSO and FS-31, FS-34, and FS-35**
- Composed of short chain C-6 perfluoro telomer

Typical Properties¹

Appearance	Clear, pale yellow liquid
Ionic Character	Nonionic
Composition	Approx. 50% actives,
Flash Point	>95°C, Pensky-Martens, closed cup
Density (25°C)	1.1 g/ml
pH	5.0-7.0
Melting Point(solids)	<55°C
Odor	Mild

¹ Not for specification purposes.

Solubility

Chemguard S-550 is sparingly soluble in water and most organic solvents. Chemguard can assist in determining solubility in any system.

Typical Applications

Chemguard S-550 is a dilute solution composed of 50% active fluorosurfactant in a water and solvent miscible diluent. Typical uses include paints and coatings, adhesives, inks, waxes, polishes, caulks, and cleaning solutions.

Fluorosurfactants such as Chemguard S-550 are much more chemically stable than typical hydrocarbon surfactants, particularly in the presence of acids, alkalies, or heat.

Recommended application rates depend on the formulation makeup but typical levels of 0.05% to 0.3% are common.

Storage and Shelf Life

Chemguard S-550 should be stored between 10°C and 50°C. Freezing and thawing will not affect the properties or performance.

Shelf life is at least five years if stored tightly sealed in the original container at temperatures below 50°C (151°F).

Health and Safety

Chemguard does not recommend this product for use in applications involving repeated exposure to skin contact, inhalation, or ingestion.

Chemguard fluorosurfactants are based on telomer synthesis. No PFOS, no PFOA, and no derivatives that decompose to them are used in the manufacturing process. Chemguard S-550 is composed of predominately six carbon (greater than 98%) and shorter perfluoro chains with no known pathway of decomposing to PFOS or PFOA.

Please refer to the material safety data sheet (MSDS) for recommended disposal, handling, and protection information.

SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED. INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe upon a relevant patent. Under no circumstances shall the Seller be liable for incidental, consequential or indirect damages for negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled or lab work and must be confirmed by Buyer by testing for its intended conditions of use.