

CHEMGUARD S-764P-14A High Performance Anionic Fluorosurfactant

Description

CHEMGUARD S-764P-14A High Performance Anionic Fluorosurfactant is a short-chain, phosphate ester type fluorosurfactant. It is water-based and free from volatile organic compounds (VOC). It provides surface tensions as low as 18 dyn/cm in water at very low concentrations.

CHEMGUARD S-764P-14A imparts excellent wetting, spreading, leveling, anti-blocking, and flow control properties on various types of water-based coatings for architectural paints and stains, concrete coatings, industrial coatings, and hydrocarbon surfactant solutions.

CHEMGUARD S-764P-14A has excellent dynamic surface tension properties which allow for the rapid attainment of low equilibrium surface tensions. It is low foaming and can provide improved dirt pick-up resistance to exterior paints and interior low-gloss paints, sealers, and stains.

Application

CHEMGUARD S-764P-14A High Performance Anionic Fluorosurfactant is a dilute aqueous solution composed of 14% active fluorosurfactant. Typical uses include leveling and oil repellency for floor polishes, paints and coatings, adhesives, inks, waxes, caulks, and wood stains.

CHEMGUARD S-764P-14A can minimize common surface defects in paints and coatings such as fisheyes, orange peel effects, and cratering. It is effective in improving anti-blocking for the new low-VOC and no-VOC paints in both semi-gloss and high-gloss formulas.

The application of CHEMGUARD S-764P-14A is generally employed when typical hydrocarbon surfactants are inadequate. Fluorosurfactants, such as CHEMGUARD S-764P-14A, are more chemically stable than typical hydrocarbon surfactants, particularly in the presence of acids, alkalis, or heat.

Recommended application rates depend on the formulation makeup, but typical levels of 0.01% to 0.30% are common. To determine the correct application rate level, screen several ranges of concentration to achieve the desired effect on the surface tension and wetting action.

Features

CHEMGUARD S-764P-14A High Performance Anionic Fluorosurfactant offers the following features:

- VOC free
- Chloride free
- Low foaming
- Imparts excellent anti-blocking characteristics
- Delivers low surface tension at low concentrations
- Effective at wetting difficult to coat surfaces
- Minimizes surface defects such as cratering and fisheyes
- Provides oil repellency to water-based stains

Solubility

CHEMGUARD S-764P-14A is soluble in water and most organic solvents. Deionized water (DI water) or soft water is recommended as dilution of this product in hard water can cause precipitation and should be avoided.

Storage and Shelf Life

Store CHEMGUARD S-764P-14A High Performance Anionic Fluorosurfactant between 5 °C and 50 °C (41 °F and 122 °F). If the agent is frozen or if solids separate, warm the agent to room temperature before use. The properties and performance of CHEMGUARD S-764P-14A are not affected by freezing or thawing. Shelf life is two years if the agent is stored and tightly sealed in the original container at temperatures below 50 °C (122 °F).

Health and Safety

CHEMGUARD S-764P-14A High Performance Anionic Fluorosurfactant is not recommended for use in applications involving repeated exposure to skin contact, inhalation, or ingestion.

CHEMGUARD fluorosurfactants are based on the telomer synthesis process and are composed of chains of six fluorinated carbons. The telomer process produces no perfluorooctane sulfonate (PFOS), and C6 materials do not break down to yield perfluorooctanoic acid (PFOA).

Refer to the safety data sheet (SDS), available at www.chemguard.com, for recommended disposal, handling, and protection information.

Typical Properties

Appearance	Clear to light yellow liquid		
Ionic Character.....	Anionic		
Percent Actives	14 %		
Diluent Composition	Water		
Density 25 °C (77 °F)	1.1 g/ml		
pH.....	9.0 - 10.0		
Flash Point.....	> 95 °C (> 203 °F)		
(Pensky-Martens, closed cup)			
Freezing Point	5 °C (41 °F)		
Refractive Index at 25 °C (77 °F).....	1.3330 - 1.3370		
Viscosity	800.0 cP		
Aqueous Surface Tension			
in DI Water, 25 °C (77 °F)			
Actives.....	0.001%	0.01%	0.1%
dyn/cm (mN/m)	25	20	18

Note: Typical Properties are not for specification purposes.

Note: The converted values in this document are provided for dimensional reference only and do not reflect an actual measurement. CHEMGUARD and the product names listed in this material are marks and/or registered marks. Unauthorized use is strictly prohibited.