

CHEMGUARD S-764P High Performance Anionic Fluorosurfactant

Description

CHEMGUARD S-764P 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 17 dyn/cm in water at very low concentrations.

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

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

Application

CHEMGUARD S-764P High Performance Anionic Fluorosurfactant is a dilute solution composed of 22% 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 minimizes 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 is generally employed when typical hydrocarbon surfactants are inadequate. Fluorosurfactants, such as CHEMGUARD S-764P, are 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 0.20% 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 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 High Performance Anionic Fluorosurfactant is soluble in water and most organic solvents. Deionized water (DI water) or soft water is recommended. Avoid hard water as dilution of this agent in hard water can cause precipitation.

Storage and Shelf Life

Store CHEMGUARD S-764P 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 performance of CHEMGUARD S-764P is 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 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 thin gel | | |
|---|---|----|----|
| Ionic Character | Anionic | | |
| Percent Actives22% | | | |
| Diluent Composition | Water, bis (2-(2-methoxyethoxy)ethyl) ether | | |
| Density 25 °C (77 °F) 1.1 g/ml | | | |
| pH | 7.0 - 9.0 | | |
| Flash Point> 95 °C (203 °F) (Pensky-Martens, closed cup) | | | |
| Freezing Point 5 °C (41 °F) | | | |
| Refractive Index at 25 °C (77 °F) 1.3495 - 1.3561 | | | |
| Viscosity | 2100 cP | | |
| Aqueous Surface Tension in Deionized Water, 25 °C (77 °F) | | | |
| Actives | | | |
| dyn/cm (mN/m) | 26 | ١8 | 17 |

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.