



Flexisperse™ 305

Overview

- Produces Powerful Cleaning Formulations with Anti-Soiling
- Encapsulates Soil and Enhances Soil Pick-Up During Vacuuming
- Unique Anionic Polymer Detergent for a Wide Range of Soil Removal and Soiling Protection Formulations
- Eliminates Rapid Resoiling when Combined with Conventional Surfactants
- Dries to a Brittle Crystalline Residue
- Anti-Soil Redeposition
- Enhances Stain Resistance
- Outstanding Dispersant for Aqueous Systems, Provides Chelating Properties
- WERCS ID number: WPS1284432
WERCS Validation number 1284432. This product has been used in at least one formulation that has received Safer Choice Approval

Applications

- Carpet Spot Remover
- Hot Water Extraction Carpet Cleaner & Traffic Lane Cleaner
- Low Moisture Carpet & Upholstery Cleaners Upholstery Cleaner
- Odor Eliminators with Anti-Soiling
- Dispersant for Paints & Coatings with stain resistance & dirt pick-up resistance

Technical Information

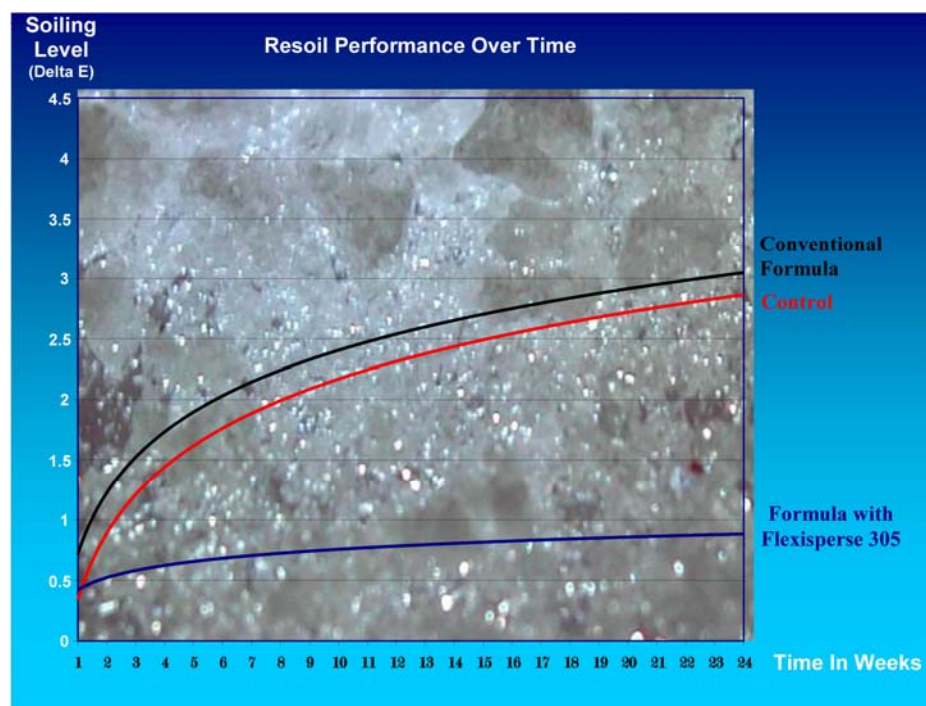
Many carpet cleaning formulations contain surfactants that leave soil attracting residues on the cleaned textile. While these formulations effectively clean, they can cause rapid resoiling. For example, many common spot removal formulations will appear to completely remove a spot or stain from a textile. In many cases, the spot will reappear within a short period of time. This effect is caused by the residual detergent left behind which attracts oily and particulate soil. The

stain did not come back. Rather, there is a new, soil induced stain due to the tacky, oily soil attracting residue. The use of Flexisperse 305 in cleaning formulations eliminates rapid resoil problems. Conventional formulations can often damage or reduce the amount of mill applied stain and soil protection. Flexisperse 305 actually enhances this protection. Consumers and professionals will often use more of a cleaning formulation than recommended to increase cleaning efficiency. Using higher concentrations of conventional cleaning formulations will lead to rapid resoil and possible damage to the fiber. Using higher levels of a Flexisperse 305 based cleaning formulation, simply increases the amount of soil protection imparted to the textile. It eliminates the liability associated with overuse and adds value to the process. By encapsulating and embrittling the tacky surfactants and residual soils, Flexisperse 305 continues to enhance cleaning and soil release long after the actual cleaning step. Each time the area is

vacuumed, encapsulated soil and surfactant residues are removed along with the Flexisperse 305 crystalline structures. By enhancing the efficiency of routine vacuuming, the frequency of cleaning is reduced. Flexisperse 305 adds value to the surfactant system, cleaning efficiency, and labor in one economical step.

Field Soiling Study

A soiling study comparing formulas with and without Flexisperse 305 was conducted. In this study, two formulas were prepared using identical types and amounts of surfactants. The conventional cleaner contained no Flexisperse 305. The other formulation contained enough Flexisperse 305 to embrittle the surfactant component. The following is a graphic representation of how well each formula performed in terms of resoil on an actual carpeted floor. The floor was soiled by normal foot traffic. The Flexisperse 305 formula was applied using a low moisture



system. The conventional chemistry was applied using hot water extraction. A control section was allowed to soil without cleaning. Measurements were taken to determine the degree of soil present at regular intervals over the length of the study. The formula with Flexisperse 305 remained much cleaner over time with regular vacuuming. The conventional formula actually soiled faster and more severely than the control. Flexisperse 305 eliminates this rapid resoil effect, reduces the frequency of cleaning and protects the carpet from soil.

Demonstration

Prepare two carpet cleaning formulations. In the first formula incorporate two to four parts Flexisperse 305 to one part of 100% active surfactant. This ratio will vary depending on the characteristics of the surfactant in the formulation. In the second formula, using the same amount of surfactant, replace the Flexisperse 305 with water. Using these two formulas, uniformly treat identical carpet samples with each respective formula using equal dilutions and amounts per square inch. Include an untreated control sample in each trial. Allow each sample to air dry for 24 hours. Use ASTM Test Method 6540 to soil the samples and compare results. The photos demonstrate the dramatic difference in soiling performance when Flexisperse 305 is incorporated into the detergent package.

Conventional Formula



Uncleaned Control



Flexisperse 305 Formula

Typical Properties

Appearance	Clear to slightly hazy, pale amber liquid
Density @ 25°C	1.13 +/- 0.02 g/ml (9.4 lbs/gal)
pH (as is)	7.5 - 8.5
Water Solubility	Soluble
Boiling Point	Approx. 100°C

Packaging and Handling

Flexisperse 305 is available in 275 gallon totes (Net Wt. 2400 lbs), 55 gallon drums (Net Wt. 480lbs), 5 gallon pails (Net Wt. 40 lbs).

DOT Classification is Non Regulated.

Refer to the Safety Data Sheet (SDS) for information on the safe use, handling, and disposal of this product.

This information relates only to the specific material referred to herein and not to its use in combination with any other material or in any process, unless explicitly stated herein. Such information is, to the best of our knowledge and belief, accurate and reliable as of the date compiled; however, no warranty, guarantee or other representation is made as to its accuracy, reliability, or completeness, or regarding any liabilities arising from others' intellectual property rights. 20250701