



innovative chemical technologies, inc.

## **FLEXIPEL S-22WS**

### **TECHNICAL DATA SHEET**

- ◆ **Partially Fluorinated Acrylic Polymer**
- ◆ **Exceptional Oil, Water, Alcohol And Soil Repellency**
- ◆ **Virtually Odorless And Colorless**
- ◆ **Dissolved In Odorless Mineral Spirits**
- ◆ **Shipped As DOT Non Regulated In Containers Less Than 119 Gallons**
- ◆ **Virtually No Settling (Either as supplied or when diluted) At Most Any Temperature**
- ◆ **Ambient Cure**
- ◆ **Ability To Use One Product For Carpet, Upholstery, Rugs, Leather(Finished and Nubuck), Apparel, Stone/Masonry, Wood And Most Any Hard Surface**
- ◆ **Will Dry And Cure On Most Any Surface**
- ◆ **Will Not Affect The Appearance, Feel, Color, Odor, Or Other Properties Of The Treated Surface**
- ◆ **Treated Surfaces Are Easier To Clean and Resistant To Abrasion And Cleaning**
- ◆ **Can Be Diluted In A Wide Range Of Solvents**
- ◆ **Contains No Chlorofluorocarbons, Chlorinated Solvents, Or Hydrochlorofluorocarbons**

103 Walnut Grove Road, Cartersville, GA 30120  
P.O. Box 72562, Marietta, GA 30007-2562  
Phone: 770-607-9340 • Fax: 770-607-9341

## APPLICATIONS

- ◆ Upholstery
- ◆ Carpet
- ◆ Apparel (Fabrics of all types, including fine silks)
- ◆ Rugs
- ◆ Wood and Decks
- ◆ Canvas (Tents, Boat Covers, Etc.)
- ◆ Concrete
- ◆ Stone
- ◆ Tile
- ◆ Grout Sealers

## FORMULARY

Typically, 1 part Flexipel S-22WS is diluted with 20-60 parts of odorless mineral spirits or solvent of choice.

- ◆ Adjust level of S-22WS based on cost/performance properties required
- ◆ Dries to touch in 30-120 minutes and achieves maximum repellency in 16-24 hours, depending on application rates and conditions
- ◆ Can be applied with a low pressure airless sprayer (less than 60psi), roller or brush depending on the application. **NEVER USE A PAINT SPRAYER OR OTHER HIGH PRESSURE EQUIPMENT TO APPLY PRODUCT.** Power paint sprayers and other high pressure applicators generate high pressures, aerosolize the product and can create significant combustion and health hazards. Always use adequate ventilation. See MSDS for more information.

## **TECHNICAL INFORMATION**

Since Flexipel S-22WS is a fluorinated polymer, it is vastly superior to silicone based protectors. While silicone based protectors provide water repellency, they have very limited alcohol repellency and provide no oil repellency. In fact, silicone based protectors are oleophilic (oil loving) and actually attract oil based stains and oily soil. Not only do silicone protected surfaces become soiled more rapidly than untreated surfaces, but once they are soiled, they actually hold the oily soils and are very difficult to clean. A major benefit and value of Flexipel S-22WS is that surfaces protected with it, soil much slower than untreated surfaces and once they become soiled, they clean easier and more efficiently which translates into newness retention.

### **Performance Data:**

1 part of Flexipel S-22WS was diluted with 20 parts of Odorless Mineral Spirits and lightly sprayed on a variety of fabrics ranging broadly in construction, end-use, and composition. Application rate was between 1.0 and 1.5 fluid ounces/square yard of fabric which was sufficient to evenly wet the fabrics. The fabrics were allowed to dry and cure overnight (24 hours). Similar applications were performed for salt treated decking material and concrete, but the application rate was 1 gallon per 400-600 sq. feet.

### **Water/Alcohol Repellency Drop Test (DuPont Test Method)**

- ◆ Repellency was measured by applying 3 drops of test liquid and observing wetting of the surfaces. If the drops were repelled for longer than 10 seconds the surface was judged to be repellent to that test liquid. Test liquids ranged from 2% Isopropyl Alcohol to 100% Isopropyl Alcohol. The higher the concentration of Isopropyl Alcohol, the more repellent the surface.
- ◆ All fabrics repelled 100% Isopropyl Alcohol.

### **Oil Repellency Drop Test (AATCC Test Method 118-1989)**

- ◆ Repellency was measured by applying 3 drops of test liquid and observing wetting of the surfaces. If the drops were repelled for longer than 30 seconds the surface was judged to be repellent to that test liquid. Test liquids ranged from mineral oil (1 rating) to Decane (6 rating). The higher the number test liquid the more repellent the surface. Decane (6 rating) is more difficult to repel than Dodecane (5 rating), which is more difficult than Tetradecane (4 rating) and so forth.
- ◆ All fabrics repelled at least a 4 oil and most repelled a 5 or 6 oil with the average of all surfaces tested equal to 5.2 out of 6.

## **TYPICAL PROPERTIES**

Appearance	Colorless to light yellow liquid
Density @ 25C	0.84 +/- 0.04 g/ml (7.0 lbs/gal)
Odor	Mild
Water Solubility	Insoluble
Boiling Point	Approx. 320 F
Freezing Point	Gels at 9F Can be restored to normal by warming to 40F
Evaporation Rate	n-butyl acetate = 1: 0.1
Solids. %	22.0-23.0

## **PACKAGING/HANDLING**

Available in 55 gallon steel drums (350lbs net) and 5 gallon plastic pails (32lbs net).  
DOT Proper shipping Name – Petroleum Distillates, N.O.S.,  
Combustible Liquid UN 1268, PG III.

**In containers of 119 gallons or less, this product is not regulated by DOT.**