



innovative chemical technologies, inc.

## **FLEXIPEL AM-95**

### **TECHNICAL DATA SHEET**

- ◆ **Partially Fluorinated Polymer**
- ◆ **Provides Superior Ambient Cure Fabric Protection**
- ◆ **Exceptional Oil, Water, And Alcohol Repellency**
- ◆ **Provides Enhanced Cleanability And Soil Release**
- ◆ **Readily Dilutes In Water With Excellent Shelf Stability**
- ◆ **Meets All VOC Regulations**
- ◆ **Ambient Cure**
- ◆ **Ability To Use One Product For Apparel, Upholstery, And Exterior Fabrics**

## **APPLICATIONS**

- ◆ **Upholstery**
- ◆ **Apparel (all types)**
- ◆ **Awnings**
- ◆ **Boat And RV Covers**
- ◆ **Patio Furnishings**

## **FORMULARY**

Recommended dilution rates vary from 4% (24 to 1) to 10% (9 to 1) Flexipel AM-95 depending on the application, application rate, desired performance and cost parameters. Typical application of dilution is approximately 1.5 fluid ounces/square yard. Addition of a preservative is recommended for dilutions. Some preservative candidates include Nipacide BIT 20, Dantoguard Plus (Granular), or Proxel GXL (typically, these preservatives are effective at concentrations between 0.05% and 0.10% on weight of final product). Use deionized water to improve shelf stability of diluted products. Flexipel AM-95 is shear sensitive and care should be taken when making dilutions to avoid foaming and over mixing. Flexipel AM-95 should be added to deionized water gently and subsurface if possible. Very little mixing is required to evenly distribute the Flexipel AM-95 in the final diluted product. Also note that Flexipel AM-95 is most stable when formulated on the acid side and pH above 8 should be avoided as this will significantly destabilize the dispersion.

**Note:** Cure time for maximum protection is approximately 24 hours, although most formulations should dry to the touch within 1-2 hours. Application rates, concentration of AM-95 used, and temperature/humidity can impact dry/cure times.

## **TECHNICAL INFORMATION**

Flexipel AM-95 is a partially fluorinated polymer designed for aftermarket, ambient cure applications. However, it can also be used in mill applications, especially when limited drying capacity is available. Flexipel AM-95 provides exceptional oil, alcohol, and water repellency, as well as soil release. It is used to protect upholstery, apparel (all types), and exterior fabrics from oil and water based stains and soiling. This fluorochemical dispersion can be co-applied with other materials, such as stain resists (see Flexisperse AM-210), antistats (such as Flexiguard FR-42), and ultraviolet light absorbers (see Flexisorb AQ-50), and stands out compared to other fluorochemical soil and stain resist products because it is compatible with a broad range of materials and delivers excellent water repellency in their presence. Flexipel AM-95 allows you to use one product on upholstery, apparel, and exterior fabrics with superior results.

Flexipel AM-95 is a concentrated product that readily dilutes in water and has exceptional shelf stability after dilution. Products formulated with Flexipel AM-95 meet all current VOC regulations.

### **Performance Data:**

1 part of Flexipel AM-95 was diluted with 9 parts of water and sprayed on a variety of fabrics ranging broadly in construction, end-use, and composition. Application rate was approximately 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).

### **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 (1 rating) to 50% Isopropyl Alcohol (6 rating). The higher the concentration of Isopropyl Alcohol (higher number rating), the more repellent the surface.
- ◆ All fabrics repelled 50% Isopropyl Alcohol and were rated a 6 in water repellency.

### **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 oil with the average of all surfaces tested equal to 4.8 out of 6.

## **TYPICAL PROPERTIES**

Appearance	Off-White Aqueous Dispersion
Density @ 25C	1.03 +/- 0.02 g/ml (8.6 lbs/gal)
pH (as is)	3.0 - 5.0
Water Solubility	Dispersible
Boiling Point	Approx. 100 C

## **PACKAGING/HANDLING**

Flexipel AM-95 is available in totes (Net Wt. 2200 lbs),  
55 gallon drums (Net Wt. 440 lbs) and 5 gallon pails (Net Wt. 40 lbs).  
DOT Classification is Non Regulated.