

# Masurf<sup>®</sup> FP-420

## Concentrated Fluoroaliphatic Penetrating Sealer & Surface Protectant Optimized for Ambient and Low Temperature Application

### Overview

MASURF FP-420 is a telomer based, water-based fluoroaliphatic water and oil repellent fabric and penetrating sealer & surface protectant that imparts exceptional water and oil repellency to fabrics & surfaces, including upholstery and home furnishings, after ambient temperature dry/cure.

MASURF FP-420 is a stable water-based emulsion that can be applied to fabrics & surfaces by immersion or spray. FP-420 can be diluted and packaged as a Ready-to-Use product or formulated for specific end-use applications such as **Leather Treatment** and **Stone & Tile Water and Stain Protection**.

MASURF FP-420 is Non-Flammable, and does not contain or release ozone depleting chlorofluorocarbons (CFC's), alkylphenol ethoxylates (APE's), and does not release formaldehyde. Masurf FS-Fluorosurfactants and Masurf FP-Fluoropolymers do not contain PFOS. Masurf FS and FP products are manufactured with telomerization process fluoroaliphatic intermediates that do not contain, release or have been shown to degrade to perfluorooctane sulfonate (PFOS).

### Compare\* to Zonyl 8740.

### Typical Properties

Classification.....	Fluoroacrylate copolymer emulsion
Charge.....	Weakly cationic
Physical form.....	Translucent emulsion
Non-volatile (1hr. @ 105°C, %)	20.0±1.0
Specific gravity (25°C)	1.08±0.04
pH.....	3.0±1.0
Flash point.....	>200°F (PMCC)
Shipping.....	Non-Red Label
Storage.....	Store at 32°F(0°C) to 100°F (38°C)

### Handling Information

Refer to and follow the guidelines in the Material Safety Data Sheet (MSDS) available from Mason Chemical Company for information on the safe use, handling and disposal of this product.

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## TYPICAL PERFORMANCE PROPERTIES

Masurf FP-420 treatment imparts resistance to soiling, oil repellency and water repellency to fabrics when properly applied. Masurf FP-420 treatment is durable to regular usage and vacuuming of the treated substrates. Masurf FP-420 works effectively on the various fibers used in apparel, automotive and household upholstery, and other home furnishings. It is also suited for nonwoven fabrics, flocked fabrics and sculptured patterned fabrics.

Masurf FP-420 is also well suited for mill application to temperature sensitive fabrics such as polypropylene, and can be applied as a spin finish to filament or spun staple as a non-wicking finish.

Application can be done by spraying, followed by complete drying at ambient temperature. Add-on levels depend on fiber and construction, as well as level of performance desired. In general, 8-16 ounces/gallon (6-12% wt/wt) dilution is sprayed at approximately 1 gallon per 600 square feet, then ambient temperature dried. A uniform spray is essential to insure an even, optimum treatment.

### Surface Protection Applications-

MASURF FP-420 is an efficient film-former that imparts durable and long lasting water and oil repellency to a range of surfaces and substrates. As a **Stone and Tile Protector**, MASURF FP-420 treatment is an effective soil and stain repellent, including semi-solid staining materials such as tar and gum. The following formulation illustrates this application:

### Concrete, Stone & Tile Protector

Ingredients:	Wt.%
Masurf FP-420.....	10.0
Water.....	90.00

#### Notes:

Mix in order listed.  
Apply Ready-to-Use, allow to air dry 48 hours.  
pH: 5.1  
Weight per gallon: 8.4 pounds

## HANDLING INFORMATION

Masurf FP-420 is a shear sensitive emulsion. Avoid shear conditions such as reciprocating pumps or high shear mixers. Gravity feed, and/or sub-surface mixing is recommended. If pumping is required, use low pressure diaphragm or equivalent pumps.

Wear safety glasses with side shields or goggles to avoid eye contact. Wear appropriate gloves to avoid skin contact.

In operations where mists, vapors, or fumes are generated, wear a respirator selected by a technically qualified person for the specific work to avoid inhalation. Suitable ventilation must be used during application. Based on properties displayed by similar materials, the fluoroaliphatic component of this emulsion, if dispersed as a fine particle, may have the potential to induce a pneumonia-like condition.

In spray applications, use a coarse spray device such as a trigger sprayer or low pressure (35-45 psi) dispenser with particle size production of greater than 15 microns. Adjust spray pressure to keep particle size greater than 15 microns. Do not aerosolize or atomize.

DO NOT use Masurf FP-420 at temperatures above 200°C. Use of FP-420 above such temperatures may create toxic degradation and the generation of hydrogen fluoride, carbonyl fluoride, carbon monoxide, and carbon dioxide. For further information, please refer to the Material Safety Data sheet.

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