Fabric Life Services "4" Guard Comparison Sheet

Or "everything you always wanted to know about fabric protectors but were afraid to ask"

Property	Silicone	Polymer	Fluorochemicals	FLS "4" Guard
Water Repellency*	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$	√√	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$
Oil Repellency*	– None	– None	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$
Soil Resistance		\sqrt{V}	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$
Soil Release		$\sqrt{}$	$\sqrt{\sqrt{\sqrt{2}}}$	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$
UV Protection	– None	– None	– None	$\sqrt{\sqrt{\sqrt{\sqrt{=}}}}$ SPF 40
Durability	\checkmark	$\sqrt{}$	√√	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$
Discoloration	- Can alter color/feel	+ Can Yellow	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$
Odor*	Strong Odor	Chemical Odor	Chemical Odor	$\sqrt{}$
Finish Compatibility	' – No	$\sqrt{}$	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$
Mfg. Recommended	– No	$\sqrt{}$	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$	$\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{$
All Fiber Suitability	√ − *	√ *	√√ *	√√√

CLARIFICATION – ADDITIONAL INFORMATION

Oil Repellency: Silicone repellents have *no oil repellency* and actually *facilitate the fixing of oil based stains* into the fabric.

Soil Resistance: Silicone attracts airborne dust & dirt.

Soil Release: Silicone can become "gummy" and make cleaning more difficult.

UV Protection: Silicone, Polymers like Guardian® and Fluorochemicals like Scotchguard® and

Teflon® Offer NO protection from UV fading. (See references)

Discoloration: Silicone & polymers can yellow from age and sunlight.

Odor: The strong odor of most in home treatments is related to the low-grade solvent carrier. **Compatibility:** Manufacturers of "breathable" woven outdoor fabrics use a fluoropolymer treatment for factory finish. Silicone treatments are not compatible and neutralize some of the stain resistance properties of fluoropolymer finished fabrics.

All Fiber Suitability: *

- 1. Silicone will give water repellency only for all fabrics but because it can become "gummy" will cause flattening problems with velvets & Chenille.
- 2. More and more (check the label) fabrics are incorporating rayon and polyester, which are not protected by standard solvent-based treatments. This includes most "Factory Finishes"
- 3. Factory water-based finishes will sometimes work on rayon & polyester but cannot be used on velvet and chenille as the water and high heat necessary for curing would flatten the nap.

FLUOROPOLYMER FABRIC PROTECTORS AQUEOUS VS. SOLVENT BASED

Fluoropolymer based fabric protectors are the only choice for true fabric protection. (Technically, silicone treatments are "water repellents" only). However, even among fluoropolymer protectors quality varies greatly.

Fluoropolymer fabric protectors are produced in two general ways classified by the carrier, Aqueous and Solvent based.

AQUEOUS: In the factory finishing process, the fabric is bathed in an aqueous fluoropolymer bath and then run through a series of high heat exposures to cure the fluoropolymer. Without this high heat curing process aqueous fluoropolymer treatments never fully cure. Thus, the performance and durability is a fraction (approx. 30%) of what would be achieved at the factory.

SOLVENT: Solvent based fluoropolymer products are the only logical choice for field application for two reasons: a) better delivery to the fabric fiber, and b) full curing. Yet even among solvent based fluoropolymer treatments, performance and durability can vary greatly. **FLS "4" Guard** uses an advanced proprietary fluoropolymer technology which outperforms and outlasts other fluoropolymer fabric protectors.