Should I Use Presaturated Alcohol Wipes to Clean Fiber End-Faces?



Instead of using pre-saturated wipes in disposable packets — the kind they give you in restaurants — get a wipe engineered for cleaning fiber end-faces

In general, no. While pre-saturated wipes are very convenient, they usually do not deliver the perfect cleaning results that fiber optic end-faces require. The most popular pre-saturated wipes are similar to the wipes seafood restaurants offer after dinner, to clean patrons hands. These pre-saturated wipes often contain

microscopic oily residues extracted from the plastic packaging, which will then transfer to the end-face during the cleaning process. The wipes usually are the cheapest possible paper, unsuited to fiber optic cleaning. Pre-saturated wipes also cannot use fast-drying solvent fluids because they would not have a sufficiently long shelf-life; the fast-drying solvents escape from the foil packages pretty quickly. (We know, because we've tried.)

If you really need a convenient, single-use wipe the very best option would be the CleanWipes™ Singles, which is a high-purity fabric in a hermetically-sealed package.

Use it with the Sticklers™ cleaning fluid.

High-purity cleaning fluids should always be used with both wipe and swab applications. Instead, use a lint-free wipe or fiber optic swab with an engineered cleaning fluid. Carefully apply a small amount of high-purity cleaning fluid on a corner of a dry wipe or the tip of the swab and then clean the fiber optic termini. A well-engineered cleaning fluid will not only dissolve oils found on the end-face, but will help to eliminate the electrostatic charge that locks contamination on to end-faces.

In short, be wary when using pre-saturated cleaning materials unless they are specifically engineered for fiber applications.



Comparison of a Modern Cleaning Fluid versus Isopropyl Alcohol for Cleaning Fiber Optics

	Sticklers™	IPA Isopropyl
Characteristic	Cleaning Fluid	Alcohol
CHEMICAL CHARACTERISTICS		
Flammability (Flash Point)	Nonflammable, no flash point	Highly flammable flash point 11°C/54°F
VOC Content	30% VOC	100% VOC
Drying Rate	At least 20% faster drying than IPA	Slow-drying
Residues	Leaves No Residue, Evaporates Completely; 100% Volatile	Leaves residue; "water marks"
Hygroscopic	Mildly hygroscopic; will absorb small amounts of water to speed drying and dissolve light water-based oils	Infinately hygroscopic; will absorb large amounts of water from the air along with contaminents/minerals dissolved in the water
Density	High specific gravity floats particulate from fiber and ferrule surface	Relatively low specific gravity. Heavy particles not dislodged
CLEANING CHARACTERISTICS		
Ability to Clean Glass/Ceramics	Excellent	Fair
Ability to Remove Oils	Good	Fair
Ability to Remove Water-Based Oils	Good	Fair
Static-Dissipative	Good	Good
Cured Epoxy/glues Compatibility	Excellent	Excellent
Plastics Compatibility	Excellent	Excellent
Metals Compatibility	Excellent	Excellent
PACKAGING, SHIPPING AND HANDLING		
Purity	Double filtered to 0.2 microns; hermetically sealed Triton™ dispenser assures consistent purity with each use	Purity varies by grade, water content and storage conditions. Unsealed container often results in contaminated fluid. Purity decreases immediately when exposed to air due to its highly hydroscopic property
Shelf Life	Unlimited	12 months or less
Metered Dose Dispensing	Exactly 70 Mcl per dose delivers 400 cleaning events per can	Not Available
Spill-Proof Dispenser	Yes. Patented Triton™ Dispenser eliminates spills, unauthorized refilling, cross- contamination	Not Available
Shipping Classification (Ground)	Non-Hazardous, Non-Regulated	Regulated: Flammable Liquid
Shipping Classification (Air)	Non-Hazardous, Non-Regulated	Regulated: Flammable Liquid