PFAS-Alternative* Block Additive for Waterborne Coatings

TRITON™ FCX-800 and TRITON™ FCX-810 Surfactants are PFAS-alternative* block additives, designed to replace fluorosurfactants in waterborne coatings. They offer excellent room temperature and hot block resistance, with a particular emphasis on early block development. Additionally, they offer improved overall paint performance.

Key Product Features:

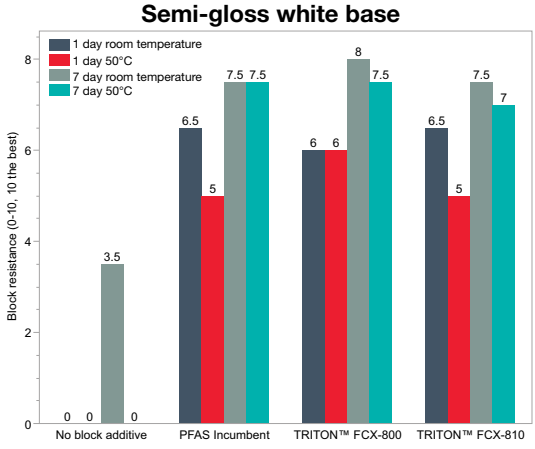
- Suitable for white, tinted, and deep base paints
- Excellent early hot block resistance comparable to fluorosurfactant
- Maximizes gloss, hiding potential and color strength
- Great alkyd adhesion
- Homogeneous solution for good handleability
- Low foam for ease of use in formulations

Products typical properties

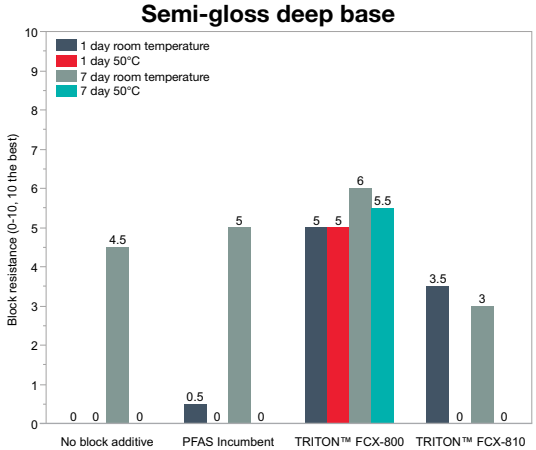
							Recommended use level			
Additive	Appearance	Chemistry, as supplied	Active solid, wt. %	Total solid, wt. %	Solvent	Salt	% solids on binder solids	% wt in total formulation	lbs / 100 gal	% active ingredient (A.I) in total formulation
TRITON™ FCX-800	Clear solution	Mixed octyl phosphate esters, potassium salt	40	48-52	Water	K^+	0.2-2.0	0.1-1.0	1-10	0.04-0.4
TRITON™ FCX-810	Clear solution	Mixed octyl and decyl phosphate esters, potassium salt	40	48-52	Water	K^+				

Excellent early and hot block resistance in both white and deep base paints**

Semi-gloss white base



Semi-gloss deep base



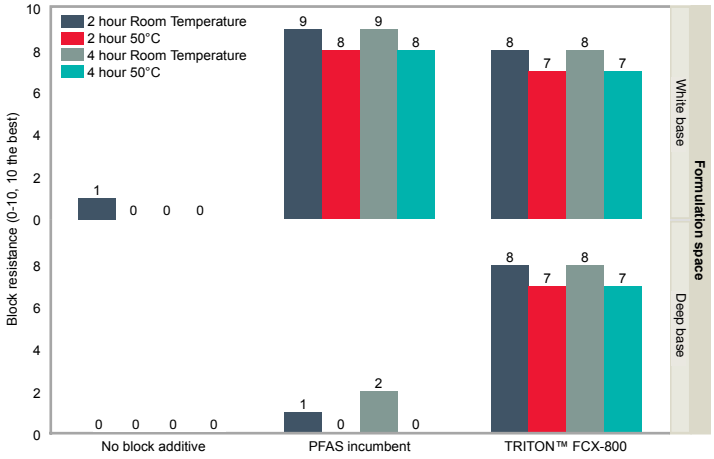
Semi-gloss white base paint (PVC=29%, VS= 38%, VOC=0 g/L) based on RHOPLEX™ AC-261LF Acrylic Emulsion. PFAS incumbent usage level is 0.04%. TRITON™ FCX-800 and FCX-810 Surfactants are 0.4%. All loading levels are based on additive solids on binder solids.

*No PFAS/PFOS material intentionally added in the manufacturing process.

**Typical values, not to be construed as specifications. Users should confirm results by their own tests.

Semi-gloss deep base paint (PVC=13.5%, VS= 35.3%, VOC=45 g/L) based on RHOPLEX™ AC-261LF Acrylic Emulsion tinted with 12oz Red Iron Oxide colorant. PFAS incumbent usage level is 0.08%. TRITON™ FCX-800 and FCX-810 Surfactants are 0.8%. All loading levels are based on additive solids on binder solids.

Fast return to service**



Semi-gloss white base paint (PVC=29%, VS= 38%, VOC=0 g/L) and Semi-gloss deep base paint (PVC=13.5%, VS= 35.3%, VOC=45 g/L tinted with 12oz Phthalo Blue colorant) based on RHOPLEX™ AC-261LF Acrylic Emulsion. PFAS incumbent usage level is 0.12%. TRITON™ FCX-800 Surfactant is 1.2%. All loading levels are based on additive solids on binder solids.

**Typical values, not to be construed as specifications. Users should confirm results by their own tests.

Improved overall performance**

Performance against incumbant material

Properties	No additive	PFAS Incumbant	TRITON™ FCX-800	TRITON™ FCX-810
Block: white base	-	=	=/+	=/+
Block: deep base	-	=	-/=/+	-/=/+
Block: early block	-	=	+	-/=
Gloss	=/+	=	+	+
Hiding (tint strength)	-	=	+	+
Adhesion (alkyd)	=	=	+	+
Stain resistance	=	=	=	=
Scrub resistance	=	=	=	=
Surfactant leaching	+	=	=	=

Worse **Better**

Tips for using TRITON™ FCX-800 and TRITON™ FCX-810 Surfactants:

- Evaluate Both Additives: Block performance can vary significantly among different binders and formulations. It's recommended to evaluate both TRITON™ FCX-800 and TRITON™ FCX-810 to find the best fit.
- Optimal Dosage: The optimal dosage is dependent on binder and formulation. Test a ladder of additive to find the optimal usage level. Do not neglect small dosage levels, as more is not always better.
- Adjust the formulation: Minor adjustments, such as the type of TiO_2, additives, or dispersants can greatly influence block performance.

Images: adobestock_232335896

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