

TF10 Series

PTFE Filled Polyurethane Coating



Product TF10 Series PTFE Filled Polyurethane Coating

Item Class Specialty Coating

TF10 is a high solid polyurethane topcoat with PTFE filling. It is a two-component air curing coating intended for use on aircraft control surfaces. In addition to its abrasion resistance properties, TF10 is also resistant to hydraulic fluids and various other chemical solvents such as those used for aircraft cleaning.

Specifications Product is manufactured to meet the performance requirements of the following specifications:

AIMS 04-04-007 - BAMS 565-005, Ty III - MEP 10-071 - SMS 93, Ty 1 - SS8869
- SS8870 - Z-12.520/AIMS 04-04-007

Catalyst & Additives Catalyst/Activator Additive

303	PS40 Accelerator
	CRL25 (Rolling/Brushing)

Use of Primers Please contact your local 3Chem representative for a complete list of epoxy primers which may be utilized with this system.

Surface Preparation Prepare substrate per OEM requirements. Refer to product application guide for detailed instructions or contact your local 3Chem representative for assistance.

Mixing Instructions

Base	Catalyst/Activator	Mix Ratio
TF12-XXXX (Semi-Gloss)	303	1:1
TF13-XXXX (Flat)	303	1:1

Shake (Base) for 15 minutes to assure no solid settlement remains in can. Add component B catalyst to component A paint first. Mix ratio for material is 1-part component A paint, 1-part component B catalyst. No thinner should be added to semi-gloss or flat colors. (Kit yield either 2 gallons or 2 quarts). Must ensure mix ratio is exact to obtain desired semi-gloss or flat finish.

Induction Time Although no induction time is needed. Once mixed together, ensure that admixed material is continuously stirred for at least 5 minutes before proceeding.

Spraying Viscosity Gloss Colors: 17-19 Seconds with #2 Zahn cup, Semi-Gloss/Flat Colors: 19-22 Seconds with #2 Zahn cup

Pot Life 7 Hours @ 21° Celsius, 70° Fahrenheit

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Film Thickness 2-3 MILS DFT (2 Coats @ 1-1.5 DFT) Wet film thickness should be 4-6 MILS total between 2 coats

Application Instructions

Temperature and Humidity	Minimum	Maximum
Temperature Celsius	11°	35°
Temperature Fahrenheit	52°	95°
Humidity	33%	74%

Spray Equipment

Spray Gun Type	Tip/Nozzle Size	Cap Pressure	Pot Pressure
Conventional Air	1.3 - 1.6 mm	40 to 60 psi	10 to 20 psi
HVLP	1.4 - 1.6mm	10 psi Maximum	10 to 20 psi
Electrostatic	1.2 - 1.5mm	45 to 60 psi	10 to 40 psi

Temperature	Wet-Edge	Time Between Coats	Dry to Tape	Dry to Handle	Full Cure
52-65°F (11-18°C)	40 Min	30-50 Min	5-6 Hours	7-8 Hours	6 Days
66-85°F (19-29°C)	35 Min	30-45 Min	5-6 Hours	7-8 Hours	6 Days
86-95°F (30-35°C)	30 Min	30-40 Min	6-7 Hours	7-8 Hours	6 Days

Only mix enough material to be applied on initial coat. Always add component B activator to component A paint. Complete kit of material will yield 2 US Gallons (7.5 liters). 1-gallon component A paint, 1-gallon component B activator.

Apply one even wet coat of material using a uniform spray pattern. Cross coat may be used to achieve 100% coverage in one single coat depending on color. Note: Apply only one coat of material to achieve proper gloss requirement of product.

Application Instructions PS40 Accelerator (Fast dry additive mix options)

PS40 Accelerator	Dry Between Coats	Dry to Handle	Dry Hard	Pot Life	Full Cure
1% By Volume	12 Minutes	2 Hours	4 Hours	4 Hours	6 Days
1.5% By Volume	10 Minutes	1.5 Hours	3 Hours	3 Hours	6 Days
2% By Volume	5 Minutes	45 Minutes	1 Hour	45 Minutes	6 Days

*Note: Overuse of PS40 additive may affect product gloss and finish

Theoretical Coverage 800-900 sq. ft / gallon @ 1 mil 20-22m² / liter @1 mil
*Coverage based on 100% transfer efficiency rate

Color Available in various colors

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Gloss

Semi-Gloss colors: 17-30 @ 60 degrees
Flat/Matt Colors: Less than 5 @ 60 degrees

Volatile Organic Compound 300 – 390 g/l

Shelf Life

24 Months (When stored in climate-controlled environment between 60-80° F)
*Product may be re-certified upon inspection by 3Chem.

Safety Instructions

Always read material safety data sheet (SDS) and product label before utilizing this product. Product SDS is available upon request.

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PRODUCT TECHNICAL DATA SHEET