

FE107 Winguard Topcoat

Product Description

FE107 Winguard is a single pack, aluminium, pigmented polyurethane topcoat, designed for the protection of upper surfaces of wings and horizontal tail-planes.

- Fast drying
- Excellent flexibility
- Chemical resistant & weather resistant
- Applicable over polyurethane & urethane compatible epoxy primers
- Service temperature -54 to 177°C (-65 to 350°F)

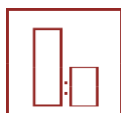
Components



Mix Ratio (by volume)

Gravity/Suction

- FE107 (Base) 4 parts
- T187 (Thinner) 3 parts



Airless/Pressure Pot

- FE107 (Base) 2 parts
- T187 (Thinner) 1 part

For brush or roller application, no thinning is required

Specifications



FE107 is qualified to:

- PPG Standard

FE107 is compatible with the following primer specifications:

- AIMS 04-04-001
- AIMS 04-04-004
- AIMS 04-04-055
- ASNA 4248
- AVN 7-003
- BMS 10-79
- BS 2X33 A+B
- Mil-P-23377

Note: PPG Aerospace recommends you check the most recent specification QPLs for updated information.

FE107 Winguard Topcoat

Surface Preparation and Pretreatment



Ensure surface is clean, dry and intact. If necessary, abrade with P240 or P320 using a DA sander, de-grease with suitable solvent - DeSoto® CN20, CN44 or Desoclean™ 45 solvent cleaners are recommended.

Wash primer P99 + polyurethane primer PAC33 or epoxy primer PR143 over chromate conversion coating are the recommended pre-treatments.

Instructions for Use



Base may require mechanical agitation. Ensure all components are adequately dispersed. Adjust to recommended viscosity by addition of thinner while stirring. For roller/brush application, thinning is not necessary but may be thinned if required.

Note: All products and components should be placed in ambient conditions of 15-30°C (59-86°F) for at least 24 hours prior to mixing and application.



Induction Time:

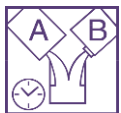
Not required



Viscosity: (23°C/73°F)

	<u>Gravity/Suction</u>	<u>Airless/Pressure Pot</u>
• AFNOR4	18 - 20 seconds	• AFNOR4 26 - 29 seconds
• BSB3	35 - 40 seconds	• BSB3 50 - 54 seconds
• BSB4	21 - 23 seconds	• BSB4 27 - 29 seconds
• FORD4	17 - 19 seconds	• FORD4 23 - 24 seconds
• ISO4	32 - 38 seconds	• ISO4 46 - 53 seconds
• ZAHN2	22 - 25 seconds	• ZAHN2 30 - 33 seconds

Note: Viscosities quoted are typical ranges obtained when using specified mix ratio.



Pot Life:

8 hours @ 21 - 25°C (70 - 77°F) with 1 volume of thinner

FE107 Winguard Topcoat

Application Guidelines

Recommended Application Conditions:

Temperature	15 - 35°C (59 - 95°F)
Relative Humidity	20 - 85%

Application:

Apply 1 - 2 even cross coats to achieve recommended dry film thickness.

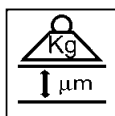


Theoretical Coverage: (ready for use with mix ratio 2:1)

3 m²/Lt @ 45 µm dry film thickness
120 ft²/US gal @ 1.8 mil dry film thickness

Recommended Dry Film Thickness:

40 - 50 µm
1.6 - 2 (mil)



Dry Film Density:

1.04 g/cm³
8.71 lbs/USgal

Dry Film Weight:

47 g/m²
0.009 lbs/ft²

Note: These application guidelines represent PPG's best advice for usage in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables.

Equipment:



Equipment Type	Tip Size	Pressure
Airmix	11"	Refer to manufacturer
HVLP Air Spray	1.3 to 18 mm	29 to 44 psi (2 to 3 bar)
Pressure Pot	1.0 to 1.2 mm	29 to 44 psi (2 to 3 bar)
Airless	11"	Refer to manufacturer

Equipment Cleaning:

Clean spray equipment before use and as soon as possible after use. DeSoto[®] CN20, CN44 or Desoclean[™] 45 solvent cleaners are recommended.

FE107 Winguard Topcoat

Physical Properties



Colour:
Aluminium

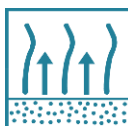


Gloss:
20 - 40 units with a 60° gloss meter



Drying Times 50% R.H	23°C (73°F)
Dry to Handle	1 hour
Dry to Tape	6 to 8 hours
Dry to Fly	48 hours
Re-coat with self	15 to 45 minutes
Full Cure	7 days

Note: Drying times listed above are dependent upon film thickness applied, air flow conditions and application technique.



Flash Off:
Product to be air dried



VOC: (ASTM)

Mixed ready for use (4:3 ratio)	760 g/Lt
Mixed ready for use (2:1 ratio)	740 g/Lt
FE107 Component	680 g/Lt
T187 Thinner	870 g/Lt



Flash Point:

FE107 Base Component	4°C (39°F)
T187 Thinner	32°C (90°F)

Shelf Life:

FE107 Base Component	24 months in original unopened container
T187 Thinner	10 years in original unopened container

Note: Shelf life may vary due to OEM specification requirements. Refer to container label for specific shelf life information.

Note: The application and performance property values above are typical for the material, but not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.

FE107 Winguard Topcoat

Storage Recommendations



Inspect the condition of the container to ensure compliance. The material should be stored at temperatures between 5°C to 35°C (41°F to 95°F) to ensure shelf life.

Note: When procuring to a qualified material specification, follow those storage instructions.

FE107 Winguard Topcoat

Health Precautions

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Safety Data Sheet (SDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An SDS is available on request. Avoid overexposure. Obtain medical care in case of extreme overexposure.

For industrial use only. Keep away from children.

Additional information can be found at: www.ppgaerospace.com

For sales and ordering information call the local PPG office at the numbers listed below:

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