Technical Data Sheet Aerospace Coatings



EC75 Epoxy Topcoat

Product Description

EC75 is a two pack, epoxy topcoat designed to provide protection of internal structures of aircraft and land based equipment.

- **Excellent adhesion properties**
- Applicable over epoxy & polyurethane primers
- Available in a wide range of gloss levels
- High chemical resistance
- High resistance to aircraft fluids including phosphate ester hydraulic fluid

Components



Mix Ratio

BASE	ACTIVATOR	THINNER	MIX RATIO (by volume)	FINISH
EC75	ACT65	T17 or T187	1: 1: 0.5-1.0	Full Gloss
EC75	ACT66	T17 or T187	1: 1: 0.5-1.0	Semi Gloss
EC75	ACT67	T17 or T187	1: 1: 0.5-1.0	Eggshell
EC75	ACT68	T17 or T187	1: 1: 0.5-1.0	Matt
EC75	ACT69	N/A	2:1	Full Gloss (Brushing)

Specifications



EC75 is qualified to:

- **DEF STAN 80-161**
- MSRR9064

Product Compatibility

EC75 is compatible with the following primer / filler specifications:

- BS2X32:1998+A2:2020 Def Stan 80-206 (withdrawn replaced by Def Stan 80-225)
- BS2X33A+B
- Def Stan 80-207 (withdrawn replaced by Def Stan 80-225)
- Def Stan 80-216
- Def Stan 80-225 Type 1 & 2

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

Surface Preparation and Pretreatment



Ensure surface is clean, dry and intact using a high performance solvent cleaner - DeSoto[®] CN20 or Desoclean[™] 45 solvent cleaners are recommended. Observe recommended overcoat window for primers.

Instructions for Use



Hand stir or mechanically shake base material until all components are uniformly dispersed. Add to base appropriate activator for gloss level required. Stir thoroughly and add thinner (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)

•	AFNOR2.5	58 - 67 seconds
•	AFNOR4	16 - 18 seconds
•	BSB3	30 - 35 seconds
•	BSB4	18 - 21 seconds
•	FORD4	15 - 17 seconds
•	ISO3	55 - 70 seconds
•	ISO4	24 - 33 seconds
•	7AHN2	20 - 22 seconds

No viscosity check required for brush application

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



Pot Life:

8 hours @ 21 - 25°C (70 - 77°F)

Application Guidelines

Recommended Application Conditions:

Temperature 15 - 35°C (59 - 95°F)

Relative Humidity 30 - 85 %

Application:

Apply one double track coat to achieve recommended dry film thickness of 30 \pm 5 μ m.



Theoretical Coverage: (ready for use with ACT65)

11 m²/Lt @ 30 µm dry film thickness 440 ft²/US gal @ 1.2 mil dry film thickness

Recommended Dry Film Thickness:

25 - 35 µm 1 - 1.4 mil



Dry Film Density: (mixed with ACT65)

1.13 - 1.64 g/cm³ 9.45 - 13.7 lbs/US gal

Dry Film Weight:

34 - $49~g/m^2~@~30~\mu m$ dry film thickness 0.006 - $0.010~lbs/ft^2~@~1.2~mil$ dry film thickness

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: EC75 is compatible with most current types of spray equipment.



Equipment Type	Tip Size	Pressure
Conventional Spray	1.2 to 1.5mm	44 to 73 psi
' '		(3 to 5 bar)

EC75 can be applied by brush. (See mix ratio table)

Equipment Cleaning:

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

Physical Properties



Colour:

Wide range of colours available



Gloss:

Full Gloss: >85 units with a 60° gloss meter
 Semi-Gloss: 50-60 units with a 60° gloss meter
 Eggshell: 15-25 units with a 60° gloss meter
 Matt: ≤ 5 units with a 60° gloss meter



Drying Times 50 % R.H.	23°C (73°F)	70°C (158°F)
Dust Free	90 minutes	
Hard Dry	16 hours	30 minutes
Dry to Overcoat	4 to 72 hours	
Dry to Fly	48 hours	3 hours
Full Cure	7 days	3 hours

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



Flash Off:

15 minutes after application prior to force dry.



VOC: (ASTM)

Mixed unthinned (spraying)	<590 g/Lt
Mixed ready for use (brushing)	<510 g/Lt
EC75 Base	<530 g/Lt
ACT65 Activator	650 g/Lt
ACT66 Activator	610 g/Lt
ACT67 Activator	600 g/Lt
ACT68 Activator	565 g/Lt
ACT69 Activator	460 g/Lt
T17 Thinner	830 g/Lt
T187	870 g/Lt



Flash Point:

EC75 Base	20°C (68°F)
ACT65 Activator	20°C (68°F)
ACT66 Activator	20°C (68°F)
ACT67 Activator	20°C (68°F)
ACT68 Activator	20°C (68°F)
ACT69 Activator	23°C (73°F)
T17 Thinner	16°C (61°F)
T187	32°C (90°F)

Shelf Life:

EC75 Base Component	24 months in original unopened container
ACT65 Activator	24 months in original unopened container
ACT66 Activator	24 months in original unopened container
ACT67 Activator	24 months in original unopened container
ACT68 Activator	24 months in original unopened container
ACT69 Activator	24 months in original unopened container
T17 Thinner	10 years 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.

<u>Note:</u> 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.

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.

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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ASC – Australia Tel 61 (3) 9335 1557 Fax 61 (3) 9335 3490

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