

# FE50/6HV Polyurethane Coating

## TECHNICAL DATA SHEET

### Product Description

FE50/6HV is a two pack, polyurethane coating designed for the protection of rivets and for overcoating sealant fillets on the internal structure of aircraft.

- Excellent flexible
- Excellent resistance to aircraft fluids including phosphate ester hydraulic oils
- Brush or spray application

### Components



#### Mix Ratio (by volume)

- Base: FE50/6HV 2 part
- Activator: ACT34 1 part
- Thinner (see below) to viscosity

Thinner: T74 (small scale spray application)

Thinner: T115 (large scale spray application)

Thinner: T127 (brush application - add as required)

### Specifications



FE50/6HV is qualified to:

- BAMS 565-007

FE50/6HV is listed on:

- ABP 4-2128

*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 cleaner are recommended. Observe recommended overcoating windows.

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## Instructions for Use



Stir or shake the base component to ensure complete component dispersion. Add activator to base component and stir thoroughly. Add required thinner to viscosity.

*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.*



**Viscosity:** ( 23°C/73°F)

- |            |                 |
|------------|-----------------|
| • AFNOR2.5 | 50 - 68 seconds |
| • AFNOR4   | 15 - 19 seconds |
| • BSB3     | 28 - 35 seconds |
| • BSB4     | 16 - 21 seconds |
| • FORD4    | 14 - 17 seconds |
| • ISO3     | 44 - 68 seconds |
| • ISO4     | 20 - 32 seconds |
| • ZAHN2    | 17 - 22 seconds |

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



**Pot Life:**

4 hours @ 21 - 25°C (70 - 77°F) - Spray Application

3 hours @ 21 - 25°C (70 - 77°F) - Brush Application

## Application Guidelines

### **Recommended Application Conditions:**

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

### **Application:**

Apply a light coat, flash off for 15 minutes before applying second coat.



**Theoretical Coverage:** (white)

15 m<sup>2</sup>/Lt @ 40 µm dry film thickness

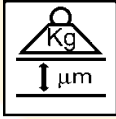
600 ft<sup>2</sup>/US gal @ 1.6 mil dry film thickness

### **Recommended Dry Film Thickness:**

35 - 50 µm

1.4 - 2 mil

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**Dry Film Density:**

1.72 g/cm<sup>3</sup>  
14.4 lbs/US gal

**Dry Film Weight:** (white)

69 g/m<sup>2</sup> @ 40 µm dry film thickness  
0.014 lbs/ft<sup>2</sup> @ 1.6 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:**



Equipment Type	Tip Size	Pressure
Airmix	9 to 11 thou	36 to 51 psi (2.5 to 3.5 bar)
HVLP Air Spray	1.0 to 1.8 mm	29 to 43 psi (2 to 3 bar)
Pressure Pot	1.0 to 1.2 mm	29 to 43 psi (2 to 3 bar)
Airless	9 to 11 thou	refer to manufacturer
Air-assisted Airless	9 to 11 thou	36 to 51 psi (2.5 to 3.5 bar)
Low Pressure Electrostatic	1.0 to 1.5 mm	43 to 73 psi (3 to 5 bar)

**Equipment Cleaning:**

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

**Physical Properties**



**Colour:**

Limited colour range available



**Gloss:**

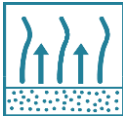
>85 units with a 60° gloss meter

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DRYING TIMES @ 50% RH	23°C (73°F)	70°C (158°F)
Dust Free	2 hours	30 minutes
Dry to Handle	6 hours	30 minutes
Dry to Tape	8 to 16 hours	30 minutes
Hard Dry	16 hours	1 hour
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 Time:

30 minutes before force dry



### VOC: (ASTM)

Mixed ready for use (unthinned)	350 g/Lt
FE50/6HV Base Component	390 g/Lt
ACT34 Activator	270 g/Lt
T74 Thinner	800 g/Lt
T115 Thinner	870 g/Lt
T127 Thinner	920 g/Lt



### Flash Point:

FE50/6HV Base Component	4°C (39°F)
ACT34 Activator	23°C (73°F)
T74 Thinner	-5°C (23°F)
T115 Thinner	-4°C (25°F)
T127 Thinner	36°C (97°F)



## FE50/6HV Polyurethane Coating

### Shelf Life:

FE50/6HV Base Component	24 months in original unopened container
ACT34 Activator	24 months in original unopened container
T74 Thinner	10 years in original unopened container
T115 Thinner	10 years in original unopened container
T127 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 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.*



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## 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](http://www.ppgaerospace.com)**

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PPG Aerospace  
Sealants and Coatings  
Darlington Road  
Shildon, Co Durham UK  
DL4 2QP

[www.ppgaerospace.com](http://www.ppgaerospace.com)

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