Technical Data Sheet Aerospace Coatings



F566-4200 CF Polyurethane Primer

Product Description

F566-4200 is an air drying, polyurethane, chromate free primer suitable for application direct to composite or wash-primed aluminium alloy.

- Conventional solids
- Chromate free
- Protection from hydraulic fluids and chemical agents

Components



Mix Ratio (by weight)

F566-4200 (5060/1344) Base
N39/1327 (0716/9000) Activator
N39/3460 (0909/9000) Thinner
to viscosity

Specifications



F566-4200 is qualified to:

- MDL 5031
- DON 63

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

F566-4200 is compatible with the following topcoat specification:

BS2X34A+B

Surface Preparation and Pretreatment



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

On Aluminium - Apply over wash primer.

 $\underline{\text{On Composite}}$ - Reactivate surface with Scotch-Brite $^{\text{@}}$ and solvent clean surface prior to application.

F566-4200

Instructions for Use



Base may require mechanical agitation. Ensure all components are adequately dispersed. Add activator to base and stir well, then add thinner while stirring.



Induction Time:

Not required

Viscosity: (23°C/73°F)

AFNOR4 16-18 seconds
BSB4 18-21 seconds
FORD4 13-15 seconds
ISO3 86-92 seconds
ZAHN2 23-25 seconds

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 30-75%

Application:

Apply 1 cross coat to reach the recommended dry film thickness



Theoretical Coverage: (unthinned)

16 m² Lt @ 30 μm dry film thickness 640 ft² US gal @ 1.2 mil dry film thickness

Recommended Dry Film Thickness:

20-35 µm 0.8-1.4 mil



Dry Film Density:

1.78 g/m³ 14.9 lbs /US gal

Dry Film Weight:

54 g/m² @ 30 μm dry film thickness 0.010 lbs/ft² @ 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:



Equipment Type	Tip Size	Air Pressure
Conventional Air Spray	1.2-1.5 mm	29 to 51 psi (2 to 3.5 bar)
Airless	Ø=0.28 mm - Angle 67 or 80°	29 to 43 psi (2 to 3 bar)

Equipment Cleaning:

Clean spray equipment before use and as soon as possible after use. DeSoto® CN20 or CN44 are recommended.

Physical Properties



Colour:

Beige



Gloss:

15-25 units with an 85° gloss meter



Drying Times @ 50% Relative Humidity	23° (73°F)	70° (158°F)
Dust Free	30 minutes	
Hard Dry	24 hours	30 minutes
Dry to Tape	6 hours	
Dry to Overcoat	6 to 72 hours	
Full Cure	7 days	

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



Flash Off Time:

30 minutes prior to force drying



VOC: (ASTM)

Mixed (unthined)	460 g/Lt
F566-4200 Base Component	510 g/Lt
0716/9000 Activator	270 g/Lt
0909/9000 Thinner	870 g/Lt



Flash Point:

F566-4200 Base Component	>21°C (70°F)
0716/9000 Activator	>21°C (70°F)
0909/9000 Thinner	>21°C (70°F)

Shelf Life:

F566-4200 Base Component 24 months in original unopened container 0716/9000 Activator 24 months in original unopened container 0909/9000 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



The material should be stored at temperatures between 5-35°C (41-95°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:

Asia Pacific

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

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Americas

1 (818) 362-6711 or 1-800-AEROMIX

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