

F580-2080 Epoxy Primer

Product Description

F580-2080 is a two component, conventional solids, strontium chromate based epoxy primer. F580-2080 can be applied to suitably pre-treated aluminium alloys for interior and exterior use on aircraft.

- Long term corrosion inhibition
- Suitable for use in aircraft fuel tanks
- Excellent fluid resistance & adhesion characteristics
- Can be used as part of the F565-4010 selectively strippable system

Components



Mix Ratio (by volume)

- | | | | |
|--------------|-----------|---------------------|------------------------------|
| • Base: | F580-2080 | (45305467) | 2 parts |
| • Activator: | F275-160 | (01809000) | 1 part |
| • Thinner: | F850-1241 | *(09109000 or T701) | To viscosity 1.0 part (max.) |

* Note: 09109000 and T701 are different product codes for the same thinner.

Specifications



F580-2080 is qualified to:

- AIMS 04-04-001
- BS2X33B

F580-2080 meets the performance requirements of:

- AIMS 04-04-004
- AIMS 04-04-014

Product Compatibility

F580-2080 is compatible with the following topcoat specifications:

- | | |
|------------------|-------------------|
| • AIMS 04-04-012 | • BS2X34 |
| • AIMS 04-04-013 | • Def Stan 80-161 |
| • AIMS 04-04-025 | • Def Stan 80-209 |
| • AIMS 04-04-032 | • MSRR 9064 |
| • AIMS 04-04-031 | |

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

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Surface Preparation and Pretreatment



Ensure that the correct surface pre-treatment has been carried out. Ensure the surface is clean, dry and intact using a high performance solvent cleaner - DeSoto® CN20 or Desoclean™ 45 solvent cleaners are recommended.

Instructions for Use



Hand stir or mechanically shake base material until all components are uniformly dispersed. Add activator to base material and mix thoroughly. Add thinner while stirring.

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:

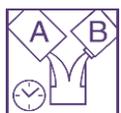
Not Required



Viscosity: (23°C/73°F)

- | | |
|------------|---------------|
| • AFNOR2.5 | 73-87 seconds |
| • AFNOR4 | 19-16 seconds |
| • BSB3 | 37-42 seconds |
| • BSB4 | 18-23 seconds |
| • FORD4 | 18-20 seconds |
| • ISO4 | 35-40 seconds |
| • ZAHN2 | 23-26 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	30-85%

Application:

Apply a single even cross coat to achieve the recommended dry film thickness of 15-25 µm (0.6-1mil)

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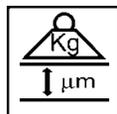


Theoretical Coverage: (ready for use)

15 m²/Lt @ 20 µm dry film thickness
600 ft²/US gal @ 0.8 mil dry film thickness

Recommended Dry Film Thickness:

15-25 µm
0.6-1 mil



Dry Film Density:

1.97 g/cm³
16.4 lbs/US gal

Dry Film Weight:

30-40 g/m²
0.0061-0.0082 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: F580-2080 is compatible with all current forms of spray equipment.



Equipment Type	Flow Rate	Tip Size (mm)	Air Pressure
Airmix	450 - 500 ml/min	∅ = 0.33 mm Angle 60° Ref : 09.114	725 - 870psi (50 - 60 bar)
HVLP Air Spray	N/A	1.0 - 1.4mm	29 psi (2 bar)
Pressure Pot	N/A	1.5mm	43 - 72 psi (3 - 5 bar)
Air Assisted Airless Electrostatic	450 - 500 ml/min	613mm	(50-60 bar)
Low Pressure Electrostatic XS4 or equivalent	450 - 500 ml/min	1.2 - 1.5mm	72 psi (5 bar)

Equipment Cleaning:

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

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Physical Properties



Colour:
Green



Gloss:
< 20 units with a 60° gloss meter



Drying Times 50 % Relative Humidity	23°C (73°F)	60°C (140°F)
Dust Free	1 hour	20 minutes
Dry to Handle	2 hours	30 minutes
Dry to Tape	4 hours	30 minutes
Dry to Sand	4 hours	30 minutes
Dry to Overcoat with F565-4010	2 - 6 hours	N/A
Dry to Overcoat with Primer/ Topcoat	4 - 72 hours	20 minutes
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:
15 minutes prior to force drying.



VOC: (ASTM)

Mixed ready for use	625 g/Lt
F580-2080 Base Component	430 g/Lt
F275-160 Activator	720 g/Lt
F850-1241 Thinner	920 g/Lt



Flash Point:

F580-2080 Base Component	14°C (57°F)
F275-160 Activator	20°C (68°F)
F850-1241 Thinner	23°C (73°F)

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Shelf Life:

F580-2080 Base Component	24 months in original unopened container
F275-160 Activator	24 months in original unopened container
F850-1241 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.

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

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

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