

PAC33 Polyurethane Primer

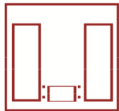
TECHNICAL DATA SHEET

Product Description

PAC33 is a two component, corrosion inhibitive, polyurethane primer modified with epoxy resin. PAC33 is designed for use with aerospace paint systems.

- Excellent corrosion resistance
- Designed for ambient curing
- High chemical resistance and flexibility
- Designed for use over P99 wash primer
- Compatible over pre-treated alloy for interior and exterior parts

Components



Mix Ratio (by volume)

- | | |
|-------------------------|-----------|
| • 4355/3600 (Base) | 5 parts |
| • 0701/9000 (Activator) | 1 part |
| • 0433/9000 (Thinner) | 4-5 parts |

Specifications



PAC33 is qualified to the following OEM specifications:

- | | |
|------------------|------------|
| • AIMS 04-04-012 | • HMDC0054 |
| • ASNA 4248 | • RPS 611 |
| • BLGG 140101 | |

Product Compatibility

PAC33 is compatible with the following:

- Sulfo-chromic or anodised pre-treated aluminium
- P99 etch primer to AIMS 04-04-012
- Polyurethane topcoat to AIMS 04-04-003 & AIMS 04-04-012

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, and that drying and overcoat times are observed. Ensure the surface is clean, dry and intact using high performance solvent cleaner - DeSoto[®] CN20 or Desoclean[™] 45 solvent cleaner are recommended.

Instructions for Use



Ensure all mixing and measuring containers are clean and free from contamination. Hand stir or mechanically agitate base material until all components are uniformly dispersed. Add activator to base, mix thoroughly and thin to recommended viscosity using approx. 4-5 volumes of thinner.

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:

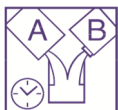
Not required



Viscosity: (23°C/73°F)

- | | |
|------------|---------------|
| • AFNOR2.5 | 45-55 seconds |
| • AFNOR4 | 14-16 seconds |
| • BSB3 | 26-29 seconds |
| • BSB4 | 14-17 seconds |
| • FORD4 | 12-15 seconds |
| • ISO3 | 29-50 seconds |
| • ISO4 | 15-22 seconds |
| • ZAHN2 | 15-19 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 35 - 70%

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Application:

Apply a double track coat or one wet coat with 50% overlap to achieve recommended dry film thickness of 15-25 μm . Avoid applying higher film thicknesses as this can create orange peel and possible intercoat adhesion failures.

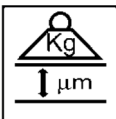


Theoretical Coverage: (ready for use)

8 - 9 m^2 Lt @ 20 μm dry film thickness
320 - 360 ft^2 US gal @ 0.8 mil dry film thickness

Recommended Dry Film Thickness:

15 - 25 μm
0.6 - 1 mil



Dry Film Density:

1.7 g/cm^3
14 lbs/US gal

Dry Film Weight:

34 g/m^2 @ 20 μm dry film thickness
0.006 lbs/ ft^2 @ 0.8 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: PAC33 is compatible with all current types of spray equipment.



| Equipment | Tip Size | Flow Rate | Air Pressure |
|------------------------|--|-------------------|----------------------------------|
| Airmix Kremlin | $\varnothing = 0.28\text{mm}$ – Angle 60° Ref: 06.134 | 320 to 360 ml/min | 725 to 870 psi (50 to 60 bar) |
| HVLP | 1.2 mm | | 22 to 29 psi (1.5 to 2 bar) |
| Conventional Air Spray | 1.5 mm | | 43 to 58 psi (3 to 4 bar) |
| Airless | Not Recommended | | |
| Airless Air-assisted | 609 to 611 | 360 ml/min | 725 to 870 psi (50 to 60 bar) |
| PRO 3500 or Pro XS4 | 1.2 to 1.5 mm | 360 ml/min | 72 to 87 psi (5 to 6 bar) |

Equipment Cleaning:

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

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Physical Properties



Colour:
Green

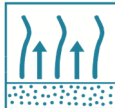


Gloss:
Not Applicable



| Drying Times @ 50 % R.H. | 23°C (73°F) | 100°C (212°F) |
|-----------------------------|----------------------------------|---------------|
| Dry to Handle | 30 minutes | |
| Dust Free | 1 hour | |
| Dry to Mask | 2 hours | 20 minutes |
| Dry to Overcoat | 1 hour (min.) 72 hours (max.) | |
| Dry to Fly | 48 hours (min.) | |
| Full Cure | 7 days | |

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



Flash Off Time:
20 minutes at 23°C (73°F) prior to accelerated cure.



VOC: (ASTM)

| | |
|----------------------|----------|
| Mixed ready for use | 730 g/Lt |
| 4355/ Base Component | 700 g/Lt |
| 0701/9000 Activator | 270 g/Lt |
| 0433/9000 Thinner | 880 g/Lt |



Flash Point:

| | |
|--------------------------|--------------|
| 4355/3600 Base Component | 2°C (36°F) |
| 0701/9000 Activator | 42°C (108°F) |
| 0433/9000 Thinner | 4°C (39°F) |

Shelf Life:

| | |
|--------------------------|--|
| 4355/3600 Base Component | 24 months in original unopened container |
| 0701/9000 Activator | 24 months in original unopened container |
| 0433/9000 Thinner | 10 years in original unopened container |

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.

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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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