

CA40000 Polyurethane Topcoat

TECHNICAL DATA SHEET

Product Description

CA40000 is a two pack polyurethane topcoat, designed for exterior protection of aircraft.

- Excellent flexibility
- Enhanced UVR resistance & high gloss retention
- Excellent chemical resistance and adhesion characteristics
- Can be used as a topcoat in selectively strippable paint schemes

Components



Mix Ratio (by volume)

- | | |
|------------------------|--------------|
| • Base:5690/... | 1 part |
| • Activator: 0796/9000 | 1 part |
| • Thinner: (see below) | to viscosity |

Thinner: 0576/9000 (standard)

Thinner: 0559/9000 (slow thinner)

Thinner: 0945/9000 (accelerated thinner)

Specifications



CA40000 is qualified to:

- BS2X34A

Product Compatibility

CA40000 is compatible with the following primer specifications:

- AIMS 04-04-012
- BS2X33B

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

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Surface Preparation and Pretreatment



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

Instructions for Use



Hand stir or mechanically agitate base material until all components are uniformly dispersed. Add activator to base component and mix thoroughly. Add required thinner to achieve recommended 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.



Induction Time:

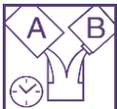
Not required



Viscosity: (23°C/73°F)

- | | |
|------------|-----------------|
| • AFNOR2.5 | 41 - 50 seconds |
| • AFNOR4 | 14 - 16 seconds |
| • BSB3 | 24 - 28 seconds |
| • BSB4 | 14 - 16 seconds |
| • FORD4 | 12 - 14 seconds |
| • ISO3 | 30 - 44 seconds |
| • ISO4 | 16 - 20 seconds |
| • ZAHN2 | 15 - 17 seconds |

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



Pot Life:

- 3-4 hours @ 21-25°C (70-77°F) with 0576/9000 Thinner
- 3-4 hours @ 21-25°C (70-77°F) with 0559/9000 Thinner
- 2 hours @ 21-25°C (70-77°F) with 0945/9000 Thinner



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Application Guidelines

Recommended Application Conditions:

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

Application:

It is recommended to apply CA40000 in either 2 or 3 cross coats with 30 to 60 minutes between coats..

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.

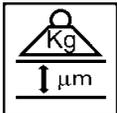


Theoretical Coverage: (ready for use)

8 m²/Lt @ 60 µm dry film thickness
320 ft²/US gal @ 2.4 mil dry film thickness

Recommended Dry Film Thickness:

50-70 µm
2-2.8 (mil)



Dry Film Density:

1.4-1.5 g/cm³
11-12 lbs/US gal

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Equipment:



Equipment Type	Tip Size	Pressure
Airmix	611	43 to 58 psi (3 to 4 bar)
HVLP Air Spray	1.6 mm	29 to 43 psi (2 to 3 bar)
Conventional Air Spray	1.6 mm	43 to 58 psi (3 to 4 bar)
Airless	9 to 11 thou	58 psi (4 bar)
Air-assisted Airless Electrostatic	9 to 11 thou	43 to 58 psi (3 to 4 bar)
Low Pressure	1.0 to 1.2	58 psi (4 bar)

Equipment Cleaning:

Clean spray equipment before use and as soon as possible after use, DeSoto® CN20 solvent cleaner is recommended.

Physical Properties



Colour:

Wide colour range available.



Gloss:

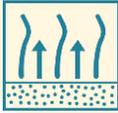
Full Gloss: ≥ 90 units with a 60° gloss meter



Drying Times @ 50% Relative Humidity	23°C (73°F)		60°C (140°F)
	with 0576/9000 or with 0559/9000	with 0945/9000	with 0576/9000 or with 0559/9000 or with 0945/9000
Dry to Overcoat	30 minutes	30 minutes	
Dry to Tape	10 to 12 hours	3 to 4 hours	30 minutes
Dry to Fly	48 hours	48 hours	3 hours
Full Cure	7 days	7 days	3 hours

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

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Flash Off Time:

15 minutes



VOC: (ASTM)

5690/.... Base Component	430-545 g/Lt
0796/9000 Activator	535 g/Lt
0576/9000 Standard Thinner	855 g/Lt
0945/9000 Accelerated Thinner	850 g/Lt
0559/9000 Slow Thinner	860 g/Lt



Flash Point:

5690/.... Base Component	27°C(81°F)
0796/9000 Activator	23°C(73°F)
0576/9000 Standard Thinner	-7°C (19°F)
0945/9000 Accelerated Thinner	-7°C (19°F)
0559/9000 Slow Thinner	-7°C (19°F)

Shelf Life:

5690/.... Base Component	24 months in original unopened container
0796/9000 Activator	24 months in original unopened container
0576/9000 Standard Thinner	24 months in original unopened container
0945/9000 Accelerated Thinner	24 months in original unopened container
0559/9000 Slow Thinner	24 months 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

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

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ASC – Australia

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Issue Date: 11/15

Lit: 4323