

Desothane® CA8300 HS Polyurethane Topcoat Gloss

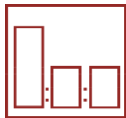
TECHNICAL DATA SHEET

Product Description

CA8300 is a high durability, polyurethane topcoat, designed for use as both an internal topcoat for aircraft structural components as well as an external topcoat for military aircraft and land based defense equipment.

- High solids, low VOC
- Chemical Agent Resistant Coating (C.A.R.C.)
- Excellent UV resistance & long term durability
- Excellent resistance to skydrol hydraulic fluid
- Service temperature -55 to 150°C (-67°F to 302°F)
- Can be used with PPG military selectively strippable scheme
- Also available in controlled military grades - separate TDS available on request

Components



Mix Ratio (by volume)

- | | |
|----------------------------|---------|
| • CA8300 (Base) | 2 parts |
| • CA8300B (Activator) | 1 part |
| • CA8300C1 or C2 (Reducer) | 1 part |

Specifications



CA8300 topcoat is qualified to:

- BS2X34 Type A & B
- Def Stan 80-209

CA8300 meets the performance requirements of:

- MIL-PRF-85285

Product Compatibility

CA8300 is compatible with the following primer specifications:

- Def Stan 80-206
- Def Stan 80-207
- BS2X33 A & B
- Mil-PRF-23377

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 solvent cleaner. DeSoto® CN20 or Desoclean™ 45 solvent cleaner are recommended. Observe recommended overcoating window for primers.

Instructions for Use



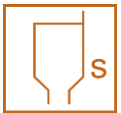
Base may require mechanical agitation. Ensure all components are adequately dispersed. Thoroughly stir or shake the base component until a smooth uniform mix is obtained. Immediately after adding the activator to the base, stir thoroughly until uniform. Add required reducer while stirring.

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)

• AFNOR4	20 - 25 seconds
• BSB3	40 - 60 seconds
• FORD4	19 - 22 seconds
• ISO4	40 - 60 seconds
• ZAHN2	25 - 29 seconds

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



Pot Life:

With C1 Reducer	4 hours @ 21 - 25°C (70 - 77°F)
With C2 Reducer	2 hours @ 21 - 25°C (70 - 77°F)

Application Guidelines

Recommended Application Conditions:

Temperature	15 - 35°C (59 - 95°F)
Relative Humidity	30 - 85%

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Application:

Apply 1 -2 double track coats to achieve the recommended dry film thickness

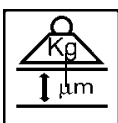


Theoretical Coverage: (ready for use)

13 m²/Lt @ 40 µm dry film thickness
520 ft²/US gal @ 1.6 mil dry film thickness

Recommended Dry Film Thickness:

35 - 45 µm
1.4 - 1.8 mil



Dry Film Density: (white)

1.52 - 1.63 g/cm³
12.6 - 13.6 lbs/US gal

Dry Film Weight: (white)

61 - 65 g/m² @ 40 µm dry film thickness
0.0125 - 0.0132 lbs/ft² @ 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	29 to 51 psi (2 to 3.5 bar)
HVLP Air Spray	1 to 1.8mm	29 to 44 psi (2 to 3 bar)
Conventional Air Spray	1 to 1.8mm	29 to 44 psi (2 to 3 bar)
Airless	11 thou	1015 psi (70 bar)
Air Assisted Airless Electrostatic	9 to 11 thou	29 to 51 psi (2 to 3.5 bar)
Low pressure Electrostatic Type XS4 Graco	1.2 to 1.5mm	58 to 73 psi (4 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.

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Physical Properties



Colour:

Wide range of colours available



Gloss:

>85 units with a 60° gloss meter



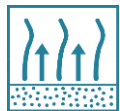
Drying Times 50% Relative Humidity	8300C1 Reducer @23°C (73°F)	8300C2 Reducer @23°C (73°F)	8300C1 & 8300C2 Reducers @ 70°C (158°F)
Dust Free	1 hour	30 minutes	20 minutes
Through Dry	6 hours	4 hours	30 minutes
Dry to Tape	6 to 8 hours approx.	3 to 4 hours approx.	1 hour
Dry to Overcoat	1 hour (min.) 24 hours (max.)	30 minutes (min.) 24 hours (max.)	30 minutes
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.



Special Note: (Aged Topcoat Re-application)

After 24-48 hours the topcoat must be cleaned and abraded using Desoclean™ 45 solvent cleaner and Scotch-Brite™ pads prior to overcoating.



Flash Off Time:

15 - 30 minutes prior to force dry



VOC: (ASTM)

Mixed ready for use	<420 g/Lt
CA8300 Base Component	<350 g/Lt
CA8300B Activator	110 g/Lt
CA8300C1 Reducer	950 g/Lt
CA8300C2 Reducer	900 g/Lt



Flash Point:

CA8300 Base Component	27°C (81°F)
CA8300B Activator	25°C (77°F)
CA8300C1 Reducer	35°C (95°F)
CA8300C2 Reducer	25°C (77°C)



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Shelf Life:

CA8300 Base Component	24 months in original unopened container
CA8300B Activator	24 months in original unopened container
CA8300C1 & C2 Reducer	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 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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