Desothane® HS CA8001B0900C HS Clearcoat

TECHNICAL DATA SHEET

Product Description

CA8001B0900C is a polyurethane clearcoat, designed for the protection of aircraft exterior surfaces.

- High solids, Low VOC
- Chemical resistant
- Excellent flexibility
- Excellent UV durability
- Improves durability of Desothane® HS CA8000 topcoat
- For use with Desothane® HS CA8000 Mica system

Components

Mix Ratio (by volume)

- CA8001B0900C (Base) 2 parts
- CA8000B (Activator) 1 part
- CA8000C (Reducer) 0.5 part

Specifications

CA8001B0900C is qualified to:

- AIMS 04-04-23

Product Compatibility

CA8001B0900C is compatible with the following topcoat specifications:

- AIMS 04-04-012
- AIMS 04-04-013
- AIMS 04-04-031
- AIMS 04-04-032
- BAMS 565-09
- BMS 10-60
- BMS 10-72
- DHMS C4.04

Note: PPG Aerospace recommends you check the most recent specification QPLs for updated information.
Desothane® HS CA8001B0900C HS Clearcoat

Surface Preparation and Pretreatment

Ensure surface is clean, dry and intact using a high performance solvent cleaner. DeSoto® CN20 or Desoclean™ 45 solvent cleaners are recommended. Observe recommended overcoating windows as per drying table below. If sanding of previous coats is required, use fine Scotch-Brite® pad and wipe clean with propyl alcohol prior to application of CA8001B0900C.

Instructions for Use

Base component should be manually stirred only. Ensure all components are adequately mixed. Add activator to base and stir thoroughly then add reducer. **DO NOT ADJUST 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)

- AFNOR4 14 - 17 seconds
- BSB3 25 - 32 seconds
- ISO4 17 - 27 seconds
- ZAHN2 15 - 21 seconds

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

Pot Life:

2 hours @ 21 - 25°C (70 - 77°F)

Application Guidelines

Recommended Application Conditions:

- Temperature 15 - 30°C (59 - 86°F)
- Relative Humidity 30 - 80%

Application:

Apply a full single track coat followed by a double track coat. Refer to below drying table for recommended overcoating intervals.
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**Theoretical Coverage: (ready for use)**

9 m²/Lt @ 50 μm dry film thickness
360 ft²/US gal @ 2 mil dry film thickness

**Recommended Dry Film Thickness:**

40 - 60 μm
1.6 - 2.4 (mil)

**Dry Film Density:**

1.13 g/cm³
9.42 lbs/US gal

**Dry Film Weight:**

56 g/m² @ 50 μm dry film thickness
0.011 lbs/ft² @ 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:**

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Tip Size</th>
<th>Flow Rate</th>
<th>Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airmix</td>
<td>611</td>
<td>280 to 320 ml/min</td>
<td>725 to 870 psi (50 to 60 bar)</td>
</tr>
<tr>
<td>HVLP Air Spray</td>
<td>1.2 to 1.4 mm</td>
<td></td>
<td>14 psi (1 bar)</td>
</tr>
<tr>
<td>Conventional Air Spray</td>
<td>1.4 to 1.5 mm</td>
<td></td>
<td>43 to 72 psi (3 to 5 bars)</td>
</tr>
<tr>
<td>Airless</td>
<td>Not Recommended</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air assisted Airless Electrostatic</td>
<td>611</td>
<td>280 to 320 ml/min</td>
<td>43 to 72 psi (3 to 5 bar)</td>
</tr>
<tr>
<td>Low Pressure Electrostatic</td>
<td>1.2 to 1.5 mm</td>
<td>220 to 320 ml/min</td>
<td>58 to 87 psi (4 to 6 bar)</td>
</tr>
</tbody>
</table>

*Note: Pressure may need to be optimised to suit local conditions*

**Equipment Cleaning:**

Clean spray equipment before use and as soon as possible after use. DeSoto® CN20 or Desoclean™ 45 solvent cleaners are recommended.
Desothane® HS CA8001B0900C HS Clearcoat

Physical Properties

Colour:
Colourless

Gloss:
>= 90 units with a 60° gloss meter

Drying Times @ 23°C (73°F) 50 % R.H

<table>
<thead>
<tr>
<th>Drying times of CA8001B0900C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Coat 8001B0900C</td>
</tr>
<tr>
<td>Time Between Coats</td>
</tr>
<tr>
<td>Dry to Overcoat</td>
</tr>
<tr>
<td>Full Cure</td>
</tr>
</tbody>
</table>

Drying times of CA8000 prior to overcoating with CA8001B0900C

<table>
<thead>
<tr>
<th>CA8000C</th>
<th>CA8000C1</th>
<th>CA8000C2</th>
<th>CA8000C3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA8000 Overcoat Time (if sanding is not required)</td>
<td>4 to 6 hours</td>
<td>3 to 4 hours</td>
<td>1 to 2 hours</td>
</tr>
<tr>
<td>CA8000 Overcoat Time (if sanding is required)</td>
<td>24 hours</td>
<td>12 hours</td>
<td>2 to 3 hours</td>
</tr>
<tr>
<td>CA8000 Mica Overcoat Time</td>
<td>6 to 7 hours</td>
<td>4 to 5 hours</td>
<td>2 to 3 hours</td>
</tr>
</tbody>
</table>

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

Flash Off Time:
Not applicable

VOC: (ASTM)

Mixed ready for use: 495 g/Lt
CA8001B0900C Base: 590 g/Lt
CA8000B Activator: 110 g/Lt
CA8000C Reducer (all types): 865 g/Lt
Desothane® HS CA8001B0900C HS Clearcoat

Flash Point:

- CA8001B0900C Base: 22°C (72°F)
- CA8000B Activator: 47°C (117°F)
- CA8000C (all types) Reducer: 22°C (72°F)

Shelf Life:

- CA8001B0900C Base: 24 months in original unopened container
- CA8000B Activator: 24 months in original unopened container
- CA8000C (all types) Reducer: 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.
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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