Technical Data Sheet Aerospace Sealants



Desothane® HD CA9000 Basecoat

Product Description

Desothane® HD CA9000 polyurethane basecoat is designed to give improved hide and reduced process flow time in combination with long pot life and longer open time for clear coating. CA9000 basecoat is available in solid colors and special effect pigments. It is designed to be used with CA9000/B900 or CA9005 clearcoat as part of the Desothane® HD basecoat/clearcoat system (BCCC).

- Paint cycle time reduction
- Excellent gloss and color retention
- Low density and excellent hide
- Excellent fluid resistance
- Compatible with all current spray equipment
- Can be applied in a wide range of conditions
- Stain resistance
- Impact and erosion resistance
- Buffable
- Humidity dependent cure profile
- Service temperature -54°C to 177°C (-65°F to 350°F)

Note: BCCC system should be used over a urethane compatible epoxy primer such as Desoprime™ series

Components



Mix ratio (by volume):

•	CA9000/XXXXX (base component)	4 parts
•	CA9000B (activator component)	4 parts
•	CA9000C (hardener component)	1 part
•	Kit yield	2.25 gallons

Specifications



CA9000 basecoat is qualified to:

AMS 3095

MEP 10-125 Type I

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

CA9000 basecoat has been tested to the following specifications:

BAMS 565-018

Product Compatibility:

CA9000 basecoat is compatible with the following primer specifications:

- AIMS 04-04-001
- AIMS 04-04-012
- AIMS 04-04-013
- BAMS 565-008
- BMS 10-72 Type VIII & Type IX
- BMS 10-79
- DGT99 993

- DHMS C4.04
- DHMS C4.18
- DMS 2144
- MEP 10-068
- MIL-PRF-23377
- VMS C4.04
- VMS C4.18

CA9000 basecoat is compatible with the following clearcoats:

- CA8800/B900
- CA8905HP

- CA9000/B900
- CA9005

Surface Preparation and Pretreatments



Desothane® HD basecoat, CA9000, can be applied over clean, dry, intact primed surfaces. For further information, refer to the Technical Data Sheet for the above mentioned primers.

Instructions for Use



Mixing Instructions:

Prior to mixing, thoroughly shake the base component. Add activator to base component and stir well. Next add the hardener component while stirring. Maintain constant agitation for 10 minutes to ensure proper mixing.

Note: It is important to condition the paint for 24 hours prior to mixing by placing all materials in the shop or hangar, with ambient temperatures between 13° and 35°C (55° to 95°F). The minimum temperature of the paint components should be 13°C (55°F) prior to mixing.



Induction Time:

Not Required



Viscosity: (23°C/73°F)

#2 Signature Zahn cup
#4 Ford cup
ISO 3mm cup
ISO 4mm cup
BSB3 cup
BSB4 cup
#6 to 20 seconds
12 to 14 seconds
#6 to 20 seconds
#7 to 50 seconds
#8 to 22 seconds
#8 to 30 seconds
#8 to 30 seconds
#8 to 17 seconds

AFNOR #2.5 cup
AFNOR #4 cup
45 to 56 seconds
15 to 16 seconds

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



Pot Life:

4 hours @ 21 - 25°C (70 - 77°F)

Application Guidelines

Recommended Application Conditions:

Temperature 15 - 30°C (59 - 86°F)

Relative Humidity 50 - 80%

Application:

Ground the aircraft and the application equipment before priming. Stir the topcoat slowly during the application. The suggested film thickness is 25 to 75 microns (1.0 to 3.0 mils). This can be accomplished by one or two medium coats with a 50% overlap. Note the first coat should be allowed to tack up before applying the second coat. If the second is applied before the first coat has tacked up, sagging can occur.

These application guidelines represent PPG's best advice in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables.



Theoretical Coverage:

24 square meters/liter at 25 microns dry film (962 square feet/gallon at 1 mil dry film) Recommended dry film thickness; 25 to 75 microns (1.0 to 3.0 mils)



Dry Film Density:

1.68 grams/cubic centimeter (14 pound/gallon)

Dry Film Weight:

42 grams/square meter at 25 microns dry film (0.0087 pounds/square feet at 1 mil dry film)



Equipment:

CA9000 basecoat is compatible with all current forms of spray equipment.

Equipment Type	Tip Size	Pot Pressure	Atomization Pressure at the Cap
Electrostatic Air Spray Gun	1.2 mm or 1.5 mm	10 to 20 psi (0.69 to 1.4 bar)	45 to 60 psi (3.1 to 4.1 bar)
Electrostatic Air Assisted Airless Spray Gun	#611 or #613 (Graco Nomenclature)	700 to 1200 psi (48 to 82 bar)	40 to 60 psi (2.8 to 4.1 bar)
High Volume Low Pressure Spray Gun (HVLP)	1.0 mm to 1.4 mm	10 to 20 psi (0.69 to 1.4 bar)	10 psi maximum (0.69 bar)
Conventional Air Spray Gun	1.2 mm to 1.8 mm	10 to 20 psi (0.69 to 1.4 bar)	45 to 60 psi (3.1 to 4.1 bar)

Equipment Cleaning:

Clean spray equipment as soon as possible after use. Flush spray equipment with DeSoto® CN20, DeSoto® CN44, or Desoclean™ 45 high performance solvent cleaner.

Physical Properties (product)



Color: Available in a variety of solid colors and special effect pigments



Gloss: The gloss of the basecoat isn't applicable. When clear coated the gloss

of the system is 90+ G.U at 60°



Dry Times @ 50-80% R.H	22 - 28°C (71 - 84°F)
Dust Free	15 - 30 minutes
Dry to Tape	2 - 3 hours
Time Between Coats	1 - 48 hours
Dry to Clearcoat	2 - 48 hours
Dry to Fly	48 hours
Full Cure	7 days

VOC

VOC (EPA method 24):

420 grams/liter
518 grams/liter
215 grams/liter
842 grams/liter



Flash point closed cup:

Base Component	29°C (84°F)
Activator Component	8°C (46°F)
Flow Control Component	77°C (171°F)

Shelf Life:

12 months from date of manufacture to most OEM material specifications. Consult the specification to verify shelf life requirements.

24 months from date of manufacture for PRC-DeSoto Standard.

Note: Shelf life is provided for original, unopened containers.

<u>Note:</u> 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.

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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