

Desothane® HD CA9007 Basecoat

Product description

Desothane® HD CA9007 polyurethane basecoat is designed to provide improved hide and reduced process flow time, in combination with longer pot life and increased open time for clear coating. CA9007 basecoat is available in solid colors and special effect pigments. It is designed to be used with CA9007/B900 or CA9005 clearcoat as part of the Desothane® HD basecoat/clearcoat system (BCCC)

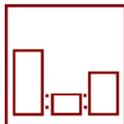
- Fast cure time
- Paint cycle time reduction
- Exceptional hide
- Compatible with all current spray equipment
- Can be applied in a wide range of conditions
- Service temperature -54°C to 177°C (-65°F to 350°F)

Desothane® HD basecoat/clearcoat system (BCCC) provides excellent:

- Gloss and color retention
- Impact and rain erosion resistance
- Stain resistance
- Fluid resistance

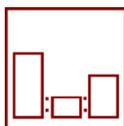
Note: BCCC system should be used over a urethane compatible epoxy primer such as Desoprime™ series Chrome Free Primers CA7502, CA7502E, CA7502EW and Chromate Primers CA7700, and CA7755.

Components (Mix ratio by volume)



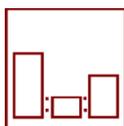
Standard temperature (65°F – 80°F)

- CA9007/BXXX (basecoat base component) 3 parts
- CA9007B (basecoat curing solution) 1 part
- CA9007C (basecoat thinner component) 1.5 parts



Fast thinner (65°F – 80°F)

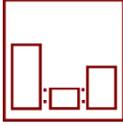
- CA9007/BXXX (basecoat base component) 3 parts
- CA9007B (basecoat curing solution) 1 part
- CA9007C1 (basecoat thinner component) 1.5 parts



Hot weather temperature (80°F – 95°F)

- CA9007/BXXX (basecoat base component) 3 parts
- CA9007B (basecoat curing solution) 1 part
- CA9007CH (basecoat thinner component) 1.5 parts

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Cold weather temperature (45°F – 65°F)*

- CA9007/BXXX (basecoat base component) 3 parts
- CA9007B (basecoat curing solution) 1 part
- CA9007C5 (basecoat thinner component) 1.5 parts

**Note: Use CA9007C5 basecoat thinner for small areas or spot repairs only.*

Specifications

CA9007 basecoat meets the performance requirements of the following specifications:

- AMS 3095
- BMS 10-72 Type X

CA9007 basecoat is listed on the following process documents:

- BAC5075 Application of Aircraft Exterior Decorative Finishes

Product compatibility:

CA9007 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

CA9007 basecoat is compatible with the following clearcoats:

- CA9007/B900
- CA9005

Surface preparation and pretreatments



Desothane[®] HD basecoat CA 9007 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 CA9007 basecoat base component for 5-10 minutes. Slowly add one (1) volume of CA9007B basecoat curing solution to three (3) volumes of CA9007 basecoat base component. Mix to uniformity. While mixing, add one and one-half (1.5) volumes of CA9007 basecoat thinner component based on application temperature. (See Components Mix Ratio by Volume). Maintain constant agitation for 5-10 minutes to ensure proper mixing.

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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:

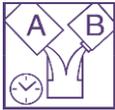
Not required



Viscosity: (23°C/73°F)

- | | |
|-------------------------|------------------|
| • #2 Signature Zahn cup | 15 to 22 seconds |
| • #4 Ford cup | 12 to 19 seconds |
| • ISO 3mm cup | 37 to 78 seconds |
| • ISO 4mm cup | 18 to 37 seconds |
| • BSB3 cup | 26 to 38 seconds |
| • BSB4 cup | 15 to 17 seconds |
| • AFNOR #2.5 cup | 45 to 76 seconds |
| • AFNOR #4 cup | 15 to 20 seconds |

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



Pot life:

2-3 hours @ 21 - 25°C (70 - 77°F)

Application guidelines

Recommended application conditions:

Temperature	7.2 - 35°C (45 - 95°F)
Relative Humidity	10 - 70%

Application:

Apply one medium horizontal coat with 50% overlap followed by a second vertical cross coat.

Ground the aircraft and the application equipment before priming. Stir the basecoat slowly during the application. The suggested film thickness is 25 to 75 microns (1 to 3 mils). This can be accomplished by one cross coat with a 50% overlap. Note: if a third pass is needed to achieve proper color, ensure the first cross coat is dry to touch before applying the final coat.

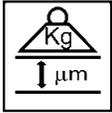
These application guidelines represent PPG's best advice in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables.

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Theoretical coverage:

19.8 square meters/liter at 25 microns dry film (807 square feet/gallon at 1 mil dry film)
Recommended dry film thickness; 25 to 75 microns (1 to 3 mils)



Dry film density:

1.41 grams/cubic centimeter (11.78 pounds/gallon)

Dry film weight:

47 grams/square meter at 25 microns dry film (0.00965 pounds/square feet at 1 mil dry film)

Note: Data listed is for BAC70846 White. Data for other colors will vary.



Equipment:

CA9007 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- #813 (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 wide range of colors



Gloss: Basecoat gloss not applicable. BCCC system gloss with CA9007/B900 clearcoat is 90+ G.U. at 60°

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Dry times	21 - 27°C (70 - 80°F) @ 30-60% R.H
Dry to touch	1 - 1 ½ hours
Dry to tape	2 - 3 hours minimum
Basecoat to basecoat overcoat time	2 - 96 hours
Dry to clearcoat	2 - 72 hours
Full cure	7 days

If basecoat to basecoat overcoat window is exceeded, Sur-Prep® AP-1 can be used to promote adhesion. Remove dust and debris with a urethane compatible tack rag, then apply the Sur-Prep® AP-1. Consult the Sur-Prep® AP-1 TDS for application instructions.



VOC:

Mixed, ready to use VOC (EPA method 24)	420 grams/liter Maximum
Base Component	329 grams/liter
Curing Solution	233 grams/liter
Thinner Component	See applicable "Safety Data Sheet"



Flash point closed cup:

Base Component	29°C (84°F)
Curing Solution	25°C (77°F)
Thinner Component	24°C (75°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.

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.

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:

Asia Pacific

ASC – Australia
Tel 61 (3) 9335 1557
Fax 61 (3) 9335 3490

ASC – Japan
Tel 81 561 35 5200
Fax 81 561 35 5201

ASC – South East Asia
Tel 65 6861 1119
Fax 65 6861 6162

ASC – Suzhou
Tel (86-512) 6661 5858
Fax (86-512) 6661 6868

ASC – Tianjin
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ASC – Central Europe
Tel 49 (40) 742 193 10
Fax 49 (40) 742 139 69

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Tel (971) 4 883 9666
Fax (971) 4 883 9665

ASC – North Europe
Tel 44 (0) 1388 770222
Fax 44 (0) 1388 770288

ASC – South Europe
Tel 33 (0) 235 53 43 71
Fax 33 (0) 235 53 54 44

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