

# TECHNICAL DATA SHEET

### **Product Description**

Desothane® HS CA8000/B900A clear topcoat is a high solids polyurethane used to protect the exterior of aircraft. It is designed to be applied over pigmented polyurethane topcoats to form a coating system providing maximum performance.

- Improves the gloss and color retention •
- Excellent adhesion
- Compatible with all current spray equipment •
- Excellent fluid resistance •
- Can be applied in a wide range of conditions
- Passes rain erosion testing
- Service temperature -54°C to 177°C (-65°F to 350°F) •

### Components

#### Mix ratio (by volume):

- 2 parts CA8000/B900A (base component) 1 part
- CA8000B (activator component)

### **Specifications**



CA8000/B900A clearcoat is qualified to:

- BAMS 565-002
- BAMS 565-009
- BMS 10-60 Type II Class B Grade D

BMS 10-72 Type VIII

- BMS 10-125 Type III, V, VI Grade D DMS 2143
- DPM 6456
- SMS 111207 Type I

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

#### **Product Compatibility:**

CA8000/B900A clearcoat is compatible with the following pigmented topcoat specifications:

- AMS 3095
- BAMS 565-002
- BAMS 565-009
- BMS 10-60 Type II
- BMS 10-72 Type VIII

- BMS 10-125 Type III
- CMS-CT-101
- DMS 2143
- DPM 6456
- MM1276



### Surface Preparation and Pretreatments



CA8000/B900A high solids clearcoat can be applied over the clean, dry, intact urethane topcoats listed above. This clearcoat is sprayed over pigmented topcoat with no abrasion step if the topcoat was applied between 6 and 24 hours. If it is longer, abrade the pigmented topcoat surface with 320 grit red Scotch-Brite<sup>™</sup> pad and clean up the surface with a weak solvent such as Desoclean<sup>™</sup> 110 solvent cleaner. For further information, refer to the Technical Data Sheet for the above mentioned topcoats.

### **Instructions for Use**



#### **Mixing Instructions:**

Prior to mixing, thoroughly stir the base component. Add activator to base component and stir well, 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

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Viscosity: (23°C/73°F)

- #2 Signature Zahn cup
- #4 Ford cup
- ISO 4mm cup
- BSB3 cup
- BSB4 cup
- AFNOR #2.5 cup
- AFNOR #4 cup

12 to 18 seconds 20 to 34 seconds 28 to 36 seconds 16 to 22 seconds 50 to 70 seconds 16 to 18 seconds

18 to 22 seconds

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



#### Pot Life:

3 hours @ 21 - 25°C (70 - 77°F)



### **Application Guidelines**

#### Recommended Application Conditions:

Temperature Relative Humidity 15 - 30°C (59 - 86°F) 20 - 90%

#### Application:

Ground the aircraft and the application equipment before top coating. Stir the clearcoat slowly during the application. The suggested dry film thickness is 37.5 to 50.0 microns (1.5 to 2.0 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. The proper amount of tack will feel like the back of masking tape with a very slight transfer. If the second coat is applied before the first coat has tacked up, sagging can occur. If the first coat is allowed to dry hard with no transfer, a heavy orange peel could result.

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:

20 square meters/liter at 25 microns dry film (800 square feet/gallon at 1 mil dry film) Recommended dry film thickness; 37.5 to 50.0 microns (1.5 to 2.0 mils)



### **Dry Film Density:**

1.16 grams/cubic centimeter (9.66 pounds/gallon)

#### **Dry Film Weight:**

29 grams/square meter at 25 microns dry film (0.0059 pounds/square feet at 1 mil dry film)





#### Equipment:

CA8000/B900A high solids clearcoat 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<sup>®</sup> CN20, DeSoto<sup>®</sup> CN44, or Desoclean<sup>™</sup> 45 high performance solvent cleaner.

### Physical Properties (product)



Color: BAC 900 Clear

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Gloss:

90+ G.U at 60°



#### **Dry Time:**

The dry time for CA8000/B900A is 8 to 10 hours at 25°C (77°F)

Accelerated cure:

Allow 30 minutes flash off at  $24^{\circ}C \pm 3^{\circ}C$  (75°F ± 10°F) followed by 30 minutes at 49°C (120°F) for dry to topcoat

Note: The cure rate of CA8000/B900A clearcoat is not affected by humidity.



# /OC

VOC:

Mixed, ready for use VOC (EPA method 24)	420 grams/liter
Base Component	570 grams/liter
Activator Component	113 grams/liter



### Flash point closed cup:

Base Component	29°C (84°F)
Activator Component	47°C (117°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  $5^{\circ}$ C to  $35^{\circ}$ C ( $41^{\circ}$ F to  $95^{\circ}$ 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** Tel (86-022) 2482 8625 Fax (86-022) 2482 8600

### Americas

1 (818) 362-6711 or 1-800-AEROMIX

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