

TECHNICAL DATA SHEET

Product Description

Desothane® HS CA8905HP clear coat is a buffable, highly durable, high solids polyurethane. It is used over Desothane® HS topcoats to protect the exterior of the aircraft.

- Excellent stain resistance
- Superior gloss retention
- · Excellent fluid resistance
- UV resistant (Non-Yellowing)
- Exceptional depth of image
- · 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)

Components



Mix ratio (by volume):

CA8905HP (base component)
 CA8905HPB (activator component)
 CA8905HPC (thinner component)
 1 part

Note: CA8905CR is available for warm weather application; however, it will no longer be VOC compliant. CA8800CT is also available. Both these thinners are designed to improve wet edge; however, the mix will no longer be VOC compliant.

Specifications



CA8905HP is qualified to the following specification:

BAMS 565-009 Type II Class A Grade A

Product Compatibility:

CA8905HP is compatible with the following topcoat specifications:

- AIMS 04-04-013
- AMS 3095
- BAMS 565-009
- BMS 10-60 Type II
- BMS 10-72 Type VIII
- BMS 10-125 Type III

- BMS 10-126 Type II Grade D
 - DHMS C4.04
- DMS 2115
- MEP 10-069
- MIL-PRF-85285



Surface Preparation and Pretreatments



Desothane® HS CA8905HP clear coat, can be applied over clean, dry, intact pigmented urethane topcoats. 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 the activator component to the base component and stir well. Then add the thinner 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	16 to 20 seconds
•	#4 Ford cup	12 to 14 seconds
•	ISO 3mm cup	37 to 50 seconds
•	ISO 4mm cup	18 to 22 seconds
•	BSB3 cup	26 to 30 seconds
•	BSB4 cup	15 to 17 seconds
•	AFNOR #2.5 cup	45 to 56 seconds
•	AFNOR #4 cup	15 to 16 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 15 - 30°C (59 - 86°F)

Relative Humidity 20 - 90%

Application:

Pigmented topcoat must achieve dry-to-tape prior to the application of the CA8905HP clearcoat. Review the TDS of the pigmented topcoat for details on the minimum and maximum overcoat times. If the base color is out of its recoat window, scuff the entire surface to be cleared with an abrasive pad or lightly sand with 320 grit or finer sand paper. The surface needs to be sanded to the point that base color has no gloss. Remove dust and debris with a mild solvent or solvent blend, such as Desoclean™ 120 solvent cleaner. A urethane compatible tack rag may be used to remove dust on the surface. Do not use excessive pressure when using a urethane compatible tack rag. Tack rag residue can be left on the base color surface and cause craters or swirl marks. Never use a tack rag wet with solvent.

Ground the aircraft and the application equipment before clear coating. Stir the clear coat 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 may 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:

17 square meters/liter at 25 microns dry film (615 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:

1.0 grams/cubic centimeter (8.33 pounds/gallon)

Dry Film Weight:

25 grams/square meter at 25 microns dry film (0.005 pounds/square feet at 1 mil dry film)





Equipment:

Desothane® HS CA8905HP clear coat 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: BAC 900 Clear



Gloss: 90+ G.U at 60°



Dry Times	13 - 21°C (55 - 70°F)	22 - 28°C (71 - 84°F)	>29°C (>85°F)
Tack Free	3 hours	2 ½ hours	2 hours
Dry to Tape	7 hours	6 hours	5 hours
Dry to Fly	60 hours	48 hours	36 hours
Full Cure	7 days	7 days	7 days

Accelerated cure for dry hard:

Allow 30 minutes flash off at $24^{\circ}\text{C} \pm 3^{\circ}\text{C}$ (75°F $\pm 10^{\circ}\text{F}$) followed by 45 minutes at 49°C (120°F)





VOC:

Mixed, ready to use VOC (EPA method 24)

Base Component

Activator Component

Thinner Component

420 grams/liter

578 grams/liter

0 grams/liter



Flash point closed cup:

Base Component 49°C (85°F)
Activator Component 196°C (385°F)
Thinner Component -9°C (15°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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ASC – Australia Tel 61 (3) 9335 1557 Fax 61 (3) 9335 3490

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