

# TECHNICAL DATA SHEET

## **Product Description**

Desothane® HS CA8201/FClear gloss military topcoat is a high solids coating used to protect the exterior of aircraft. It is used over pigmented Desothane® HS topcoats (CA8200 series) to provide maximum performance.

- Excellent adhesion
- Superior gloss retention
- Excellent fluid resistance
- Improves clean ability
- Service temperature -54°C to 177°C (-65°F to 350°F)

### **Components**



#### Mix ratio (by volume):

CA8201/FClear (base component)
 CA8000B (activator component)
 2 parts
 1 part

### **Specifications**



CA8201/FClear topcoat is qualified to:

- GC130N
- GP110AEF

- MIL-PRF-85285
- MMS 420

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

#### **Product Compatibility:**

CA8201/FClear is compatible with the following topcoat specifications:

- MIL-PRF-85285 Type I & Type IV
- MMS 420

# **Surface Preparation and Pretreatments**



Desothane® CA8201/FClear topcoat can be applied over clean, dry, intact pigmented polyurethane topcoats.



### **Instructions for Use**



#### Mixing Instructions:

Prior to mixing, thoroughly stir the CA8201/FClear base component. Add the activator component to the 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



Viscosity: (23°C/73°F)

•	#1 Signature Zahn cup	38 to 54 seconds
•	#2 Signature Zahn cup	18 to 22 seconds
•	#4 Ford cup	14 to 18 seconds
•	ISO 3mm cup	48 to 71 seconds
•	ISO 4mm cup	21 to 34 seconds
•	BSB3 cup	28 to 36 seconds
•	BSB4 cup	16 to 22 seconds
•	AFNOR #2.5 cup	54 to 70 seconds
•	AFNOR #4 cup	15 to 19 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 20 - 90%

#### Application:

Ground the aircraft and the application equipment before top coating. Stir the clear topcoat slowly during the application. The suggested film thickness is 37 to 50 microns (1.5 to 2.0 mils). This can be accomplished with 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:**

20 square meters/liter at 25 microns dry film (803 square feet/gallon at 1 mil dry film). Recommended dry film thickness; 50 to 75 microns (2.0 to 3.0 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:**

CA8201/FClear primer 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: 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)
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



#### VOC:

Mixed, ready for use VOC (EPA method 24) 420 grams/liter
Base Component 572 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°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

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