

## Desothane<sup>®</sup> HS CA8010 Flat Topcoat

### Product description

Desothane<sup>®</sup> HS CA8010 is a high solids polyurethane flat topcoat used to protect the exterior of aircraft. CA8010 is designed to be applied over Desoprime<sup>™</sup> epoxy primers.

- Excellent adhesion to epoxy primers
- Good color retention
- Excellent fluid resistance
- 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):

- CA8010 (base component) 2 parts
- CA8010DX (activator component) 1 part

*Note: Desothane<sup>®</sup> HS CA8010 flat coating is available in faster dry time requirements: CA8010, CA8011, CA8012, CA8013, and CA8014.*

### Specifications



CA8010 topcoat is qualified to the following specifications:

- BAMS 565-002 Grade B
- BAMS 565-009 Grade B Type II
- BMS 10-125 Type III Grade D
- CMS-CT-101 Type III
- DHMS C4.04 Type 6 Class B Grade B
- DMS 2143 Type 1 Class 3 Composition C
- DPM 6456
- GP110AEE
- MEP 10-069
- MM1276 Type II
- MS100029E Class HS
- VMS C4.04 Type 6 Class B Grade B

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

#### Product compatibility:

CA8010 topcoat is compatible with Desoprime<sup>™</sup> epoxy primers and the following primer specifications:

- BAMS 565-008
- BMS 10-79
- BMS 10-79
- DMS 2144
- GP110AEE
- MEP 10-060

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- BMS 10-103
- CMS-CT-201
- CMS-CT-206
- DHMS C4.01
- DHMS C4.04
- DHMS C4.18
- DMS 2104
- MEP 10-068
- MEP 10-070
- MS100016E
- VMS C4.01
- VMS C4.04
- VMS C4.18

## Surface preparation and pretreatments



Desothane<sup>®</sup> HS topcoat CA8010 can be applied over clean, dry, intact primer surfaces. For further information, refer to the Technical Data Sheets for the above mentioned primers.

CA8010 high solids topcoats can be applied over clean, dry, intact urethane compatible epoxy primers listed above. Desothane<sup>®</sup> HS topcoats may be applied over the primer with no abrasion step if applied between 2 and 48 hours after priming. If it is longer, then abrade the primer surface with 320 grit red Scotch-Brite<sup>™</sup> and clean the surface with a mild solvent such as Desoclean<sup>™</sup> 110 solvent.

## Instructions for use



### **Mixing instructions:**

Prior to mixing, thoroughly shake the base component. Add the activator 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

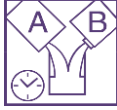


### **Viscosity: (23°C/73°F)**

- #4 Ford cup 30 seconds maximum

*Note: Viscosities quoted are typical values obtained when using specified mix ratio.*

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## Pot life:

Base	25°C (77°F)
CA8010	4 hours
CA8011	2 ½ hours
CA8012	1 ½ hours
CA8013	1 hour
CA8014	45 minutes

## 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 topcoat slowly during the application. The suggested film thickness is 50 to 75 microns (2 to 3 mils). This can be accomplished with two medium coats with a 50% overlap. The first coat should be allowed to tack up before applying the second coat. If the first coat has not tacked up, sagging of the second coat may occur. If the first coat is dry to touch, a heavy orange peel may occur in the second coat.

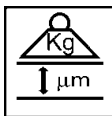
*These application guidelines represent PPG's best advice in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables.*



### Theoretical coverage:

20 square meters/liter at 25 microns dry film (775 to 875 square feet/gallon at 1 mil dry film)

Recommended dry film thickness; 50 to 75 microns (2 to 3 mils)



### Dry film density:

1.56 grams/cubic centimeter (13 pounds/gallon)

### Dry film weight:

36 grams/square meter at 25 microns dry film (0.0075 pounds/square feet at 1 mil dry film)

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## Equipment:

CA8010 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 40 psi (0.69 to 2.8 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:** Available in a wide range of colors



**Gloss:** 5 G.U. maximum at 60°



Dry Times at 25°C (77°F)			
Base Component	Dry to tape	Dry hard	Dry to fly
CA8010	8 - 12 hours	12 hours	72 hours
CA8011	5 - 10 hours	10 hours	48 hours
CA8012	3 - 4 hours	4 hours	24 hours
CA8013	1 ½ - 2 ½ hours	2 ½ hours	12 hours
CA8014	1 - 1 ½ hours	1 ½ hours	8 hours

### Accelerated cure for dry-hard:

Allow 60 minutes flash off at 24°C ± 3°C (75°F ± 10°F)  
followed by 4 hours at 49°C (120°F)

Full cure: 7 days

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## VOC

### VOC:

Mixed, ready for use VOC (EPA method 24)	420 grams/liter maximum
Base component	448 grams/liter
Activator component	358 grams/liter



### Flash point closed cup:

Base component	29°C (84°F)
Activator component	27°C (80°F)

### Shelf life:

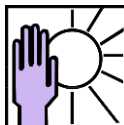
12 months from date of manufacture to most OEM material specifications. Consult the specification to verify shelf life requirements.

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.*

## 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](http://www.ppgaerospace.com)**

**For sales and ordering information call the local PPG office at the numbers listed below:**

# Desothane<sup>®</sup> HS CA8010 Flat Topcoat

## 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

## Europe and Middle East

### ASC – Central Europe

Tel 49 (40) 742 193 10  
Fax 49 (40) 742 139 69

### ASC – Middle East & India

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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