Technical Data Sheet Aerospace Sealants



Desoprime™ CF/CA7503

Product description

Desoprime™ CF/CA7503 is a high solids non chromated epoxy primer designed for use on aircraft composites and other non-metallic exterior substrates.

- Chromate free
- Compatible with Desothane[®] HS topcoats and Desothane[®] HD BCCC
- Passes the rain erosion test
- Excellent adhesion and Skydrol® 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):

CA7503A (base component)
 CA7503B (activator component)
 CA7503C (thinner component)
 1 part

Specifications



CA7503 primer is qualified to:

BMS 10-118 Type III Grade B

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

Product compatibility:

CA7503 is compatible with the following intermediate coatings:

• F565-4010

CA7503 is compatible with the following topcoats:

- AIMS 04-04-012
- AIMS 04-04-013
- AIMS 04-04-025
- AIMS 04-04-031
- AIMS 04-04-033
- AIMS 04-04-037
- AMS 3095
- BAMS 565-009
- BAMS 565-018
- BMS 10-60

- BMS 10-72
- BMS 10-125
- BMS 10-126
- CMS-CT-101
- DMS 2115
- DMS 2143
- MEP 10-069
- MEP 10-125
- MIL-PRF-85285
- MM1276

Surface preparation and pretreatments



CA7503 chrome free epoxy primer is used over clean, dry, intact composite substrates.

Instructions for use



Mixing instructions:

Shake CA 7503A base component for 10 minutes. Add four volumes of CA 7503B activator component to four volumes of CA 7503A base component. Mix to uniformity then add two volumes of CA 7503C thinner component. Mix to uniformity.

IMPORTANT NOTE: DO NOT SHAKE CA 7503B ACTIVATOR COMPONENT. STIR WELL TO UNIFORMITY BEFORE ADDING TO BASE COMPONENT. INDUCTION TIME REQUIREMENTS BASED ON TEMPERATURES.

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:

Temperature	13 - 18°C	18 - 23°C	24 - 29°C	>29°C
	(55 - 64°F)	(65 - 74°F)	(75 - 84°F)	(>85°F)
Induction time required	1 ½ hours	1 hour	30 minutes	None



Viscosity: (23°C/73°F)

#4 Ford cup

13 to 19 seconds

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



Pot life:

5 hours @ 21 - 25°C (70 - 77°F) 3 hours @ >35°C (>95°F)

Application guidelines

Optimum recommended application conditions:

Temperature 15 - 30°C (59 - 86°F)

Relative Humidity 20 - 90%

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Application:

Ground the aircraft and the application equipment before priming. Stir the primer slowly during the application. The suggested film thickness is 20 to 30 microns (0.6 to 1.2 mils). This can be accomplished with one medium coat with a 50% overlap.

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:

15 square meters/liter at 25 microns dry film (613 square feet/gallon at 1 mil dry film) Recommended dry film thickness; 20 to 30 microns (0.6 to 1.2 mils)



Dry film density:

1.69 grams/cubic centimeter (14.08 pounds/gallon)

Dry film weight:

44 grams/square meter at 25 microns dry film (0.0087 pounds/square feet at 1 mil dry film)



Equipment:

CA7503 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.

CA7503

Physical properties (product)



Color: Gray



Gloss: Not applicable



Dry Times	13 - 21°C (55 - 70°F)	22 - 28°C (71 - 84°F)	>29°C (>85°F)
Dust free	1 - 1 ½ hours	½ - 1 hours	15 - 30 minutes
Tack free	2 - 3 hours	1 - 2 hours	30 - 60 minutes
Dry to tape	3 - 4 hours	2 - 3 hours	1 - 2 hours
Dry to topcoat	3 - 24 hours	2 - 24 hours	1 - 24 hours
Dry to fly	96 hours	72 hours	48 hours
Overcoat time with F565-4010 intermediate coat	2 – 4 hours	2 – 4 hours	Not recommended
Overcoat time with	1		
CA8000 CA8800 9008	2 - 72 hours 2 - 72 hours 2 - 72 hours	2 - 72 hours 2 - 72 hours 2 - 72 hours	2 - 72 hours 2 - 72 hours 2 - 72 hours
Full cure	7 days	7 days	7 days

Accelerated cure:

Allow 30 minutes flash off at $24^{\circ}\text{C} \pm 5.6^{\circ}\text{C}$ (75°F \pm 10°F) followed by 30 minutes at 49°C (120°F) for dry to topcoat



VOC (EPA method 24):

Mixed, ready to use VOC < 350 grams/liter



Flash point:

Base Component $16^{\circ}\text{C } (60^{\circ}\text{F})$ Activator Component $-4^{\circ}\text{C } (24^{\circ}\text{F})$ Thinner Component $-9.44^{\circ}\text{C } (15^{\circ}\text{F})$

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 when procured to internal specification; 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:

Asia Pacific

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

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