

Desoprime™ HS CA7700 with “BE” Activator

TECHNICAL DATA SHEET

Product Description

Desoprime™ CA7700 series epoxy primers are designed for use on aircraft exterior and/or exterior detail parts (components). The “BE” Activator is used with electrostatic spray equipment for improved application characteristics.

- Compatible with urethane topcoats
- Passes the rain erosion test
- Excellent adhesion and corrosion resistance
- Compatible with all current spray equipment
- Excellent fluid resistance
- 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):

- CA7700A (base component) 1 part
- CA7700BE (activator component) 1 part

Specifications



CA7700 series primers are qualified to:

- BAMS 565-008 Grade B Type II
- BMS 10-72 Type VIII Composition C
- CMS-CT-201 Class A & B
- MM1275

CA7700 series primers meet the requirements of:

- AMS 3095
- BMS 10-79 Type II and Type III
- DHMS C4.18 Type III Class A Grade B
- GAMPS 3103
- MEP 10-068 Class A & B
- SMS-111204
- VMS C4.18 Type III Class A Grade B

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

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Product Compatibility:

CA7700 primers are compatible with the following topcoat specifications:

- AMS 3095
- BAC 5312
- BAMS 565-002 Class A Grade B
- BAMS 565-009 Type II Class Grade B
- BMS 10-60 Type II Class B Grade D
- BMS 10-72 Type VIII
- BMS 10-125 Type III Grade D
- BMS 10-126 Type I Grade D
- CMFS037
- CMS-CT-101 Type I
- D6-1816
- DHMS C4.04 Type VI Class B Grade B
- DMS 2143 Type 1 Class 1 Composition C
- DPM 6456
- DPM 6546
- FEDEX STANDARD
- GAMPS 3209
- GP110AEE
- MEP 10-069
- MM1276 Type II
- MS100029E Class HS
- RMS 430 Type II
- SMS-111207 Type 1
- VMS C4.04 Type VI Class B Grade B

Surface Preparation and Pretreatments



CA7700BE can be applied over DesoGel™ EAP-9, DesoGel™ EAP-12, MIL-C-5541 or chromic acid anodized pretreatments. For further information, refer to the Technical Data Sheet for the above mentioned products.

Instructions for Use



Mixing Instructions:

Prior to mixing, thoroughly shake the base component. The activator should be stirred by hand before mixing. Add activator to base component and stir well, maintain constant agitation for 10 minutes to ensure proper mixing. Constant slow agitation is recommended during entire application. Induction time may be required based on temperature.

Note: Desoprime™ CA7700 primer is designed to be at a sprayable viscosity with the standard 1:1 mix ratio. However, should you wish to thin the primer for custom applications, the recommended thinner to use is CA1805CX VOC compliant thinner. To the freshly mixed primer, add CA1805CX in increments until the desired viscosity is achieved. The maximum recommended addition of CA1805CX is 25% by volume. CA1805CX cannot be used to reclaim a mixed coating that is near the end of its pot life. Exceeding the recommended thinning level will cause runs and sags. When using CA1805CX at temperatures exceeding 35°C (95°F) the wet edge of the coating may be reduced.

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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	13-17°C (55-64°F)	18-23°C (65-74°F)	24-28°C (75-84°F)	>29°C (>85°F)
Induction Time	1 ½ hours	1 hour	30 minutes	None

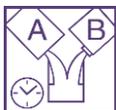
Note: At 13 to 21°C (55 to 70°F) induct base component and activator for one hour before adding CA1800CX or CA1805CX compliant thinners.



Viscosity: (23°C/73°F)

- #2 Signature Zahn cup 15 to 19 seconds
- #4 Ford cup 12 to 15 seconds
- ISO 4mm cup 18 to 22 seconds
- BSB3 cup 26 to 30 seconds
- BSB4 cup 15 to 17 seconds
- AFNOR #4 cup 15 to 16 seconds

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



Pot Life:

Primer (Base + Activator)	13-17°C (55-64°F)	18-23°C (65-74°F)	24-28°C (75-84°F)	29-32°C (85-90°F)	33-35°C (91-95°F)
CA7700 + CA7700BE	5 hours	4 hours	3 hours	2 hours	1 hour

Note: In areas where exempt solvents are allowed, to improve the spray characteristics and wet edge in hot humid environment CA1800CX or CA1805CX may be added. This will not increase the VOC where exempt solvents are permissible. The suggested level of thinner is up to 1 quart or 12.5% by volume. Do not use thinners or flow control agents from other manufacturers. These often contain material that will degrade the cure, adhesion, or appearance of the primer.

Application Guidelines

Recommended Application Conditions:

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

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Application:

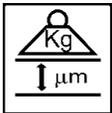
Ground the aircraft and the application equipment before priming. Stir the primer slowly while the primer is being applied. The suggested film thickness is 15 to 30 microns (0.6 to 1.2 mils). This can be accomplished by one medium coat with a 50% overlap. After applying primer, a close inspection is recommended to ensure a continuous coating was applied. The primer will appear translucent. It should not be applied to full hide.

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:

18 square meters/liter at 25 microns dry film (722 square feet/gallon at 1 mil dry film)
 Recommended dry film thickness; 15 to 30 microns (0.6 to 1.2 mils)



Dry Film Density:

1.76 grams/cubic centimeter (14.66 pounds/gallon)

Dry Film Weight:

44 grams/square meter at 25 microns dry film (0.009 pounds/square feet at 1 mil dry film)



Equipment:

CA7700 primer with “BE” activator is compatible with all current forms of spray equipment. CA7700BE activator is specifically designed for improved electrostatic application.

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.

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Physical Properties (product)



Color: Yellow



Gloss: Not Applicable



Dry Times	13 - 21°C (55 - 70°F)	22 - 28°C (71 - 84°F)	>29°C (>85°F)
Dust Free	2 - 3 hours	1 - 2 hours	½ - 1 hour
Dry to Tape	4 hours minimum	3 hours minimum	2 - 2 ½ hours
Dry to Walk	7 hours	6 hours	5 hours
Dry to Fly	72 hours	48 hours	24 hours
Full Cure	7 days	7 days	7 days
Overcoat Time with CA8000 CA8800 CA9008	2 - 72 hours	2 - 72 hours	2 - 72 hours
Overcoat Time with CA9000	3 hours minimum	2 hours minimum	1 hour minimum

Accelerated cure:

Allow 30 minutes flash off at 24°C ± 3°C (75°F ± 10°F)
followed by 60 minutes at 49°C (120°F) for dry to topcoat

VOC

VOC:

Mixed, ready for use VOC (EPA method 24)	350 grams/liter
Base Component	367 grams/liter
Activator Component	258 grams/liter

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Flash point closed cup:

Base Component	16°C (60°F)
Activator Component	-4°C (24°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.

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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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Fax 81 561 35 5201

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PRC-DeSoto International, Inc.

12780 San Fernando Road
Sylmar, CA 91342

www.ppgaerospace.com

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