

Desoprime™ HS CA7700 with “B” Activator

TECHNICAL DATA SHEET

Product Description

Desoprime™ CA7700 series epoxy primers are designed for use on aircraft exterior and/or exterior detail parts (components). This primer is designed for use with non-electrostatic spray equipment.

- Urethane topcoat compatible
- Passes the rain erosion test
- Excellent adhesion and corrosion resistance
- Compatible with all non-electrostatic 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
- CA7700B (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.

Desoprime™ HS CA7700 with “B” Activator

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



CA7700B 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.

Desoprime™ HS CA7700 with “B” Activator

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

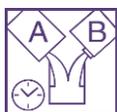
Note: At 13 to 21°C (55 to 70°F) induct base component and activator for one hour before adding CA1800CX or CA1805CX compliant thinners.



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 + CA7700B	6 hours				

Note: In areas where exempt solvents are allowed, to improve the spray characteristics and wet edge in hot humid environments, 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.

Desoprime™ HS CA7700 with “B” Activator

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 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.

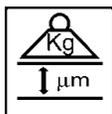
These application guidelines represent PPG's best advice in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables.



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)

Desoprime™ HS CA7700 with “B” Activator



Equipment:

CA7700 primer with “B” activator is compatible with non-electrostatic spray equipment. However, for improved efficiency with electrostatic spray equipment the suggested activator is CA7700BE instead of CA7700B.

Equipment Type	Tip Size	Pot Pressure	Atomization Pressure at the Cap
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: 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

Desoprime™ HS CA7700 with “B” Activator

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	177 grams/liter



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.

Desoprime™ HS CA7700 with “B” Activator

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

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

Desoclean, DesoGel, Desoprime and DeSoto are trademarks of PRC-DeSoto International, Inc.

All recommendations, statements, and technical data contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. User shall rely on his own information and tests to determine suitability of the product for the intended use and assumes all risks and liability resulting from his use of the product. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss, or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer or seller.

PRC-DeSoto International, Inc.

12780 San Fernando Road
Sylmar, CA 91342

www.ppgaerospace.com

Issue Date: 9/16
Lit: 1765