

Desoprime™ HS CA7422 Chrome-Free Epoxy Primer

TECHNICAL DATA SHEET

Product Description

Desoprime™ HS CA7422 chrome-free epoxy primer is a high solids coating. Used on aircraft exterior and components including aluminum and composite surfaces.

- Compatible with Desothane® HS topcoats
- Excellent adhesion and corrosion resistance
- Excellent Skydrol® resistance
- Service temperature -54°C to 177°C (-65°F to 350°F)

Components



Mix ratio (by volume):

- | | |
|---------------------------------|---------|
| • CA7422A (base component) | 4 parts |
| • CA7422B (activator component) | 4 parts |
| • CA7422C (thinner component) | 1 part |

Specifications



CA7422 primer passes the requirements of the following specifications:

- | | |
|------------------------------|--------------------------------|
| • BAMS 565-008 | • BMS 10-79 Type II & Type III |
| • BMS 10-60 Type I & Type II | • BMS 10-125 Type III |
| • BMS 10-72 Type VIII | • MEP 10-068 |

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

Product Compatibility:

CA7422 primer is compatible with the following topcoat specifications:

- | | |
|------------------------------|-----------------|
| • AIMS 04-04-013 | • DMS 2143 |
| • BAMS 565-09 | • DPM 6456 |
| • BMS 10-60 Type I & Type II | • DPM 6546 |
| • BMS 10-72 Type VIII | • MEP 10-069 |
| • DMS 2115 | • MIL-PRF-85285 |

Surface Preparation and Pretreatments



CA7422 can be applied over aluminum substrates with DesoGel™ EAP-9, DesoGel™ EAP-12, MIL-C-5541, or chromic acid anodized pretreatments.

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Instructions for Use



Mixing Instructions:

Prior to mixing, thoroughly shake the base component. The activator component should be stirred by hand before mixing. Add the activator to the base component and stir well. Then add the thinner component also under agitation. 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:

Primer induction time if used with CA8000		
Mixing Instructions	Mix components CA7422A + CA7422B + CA7422C (4:4:1 by volume)	
Temperature	13 - 20°C (55 - 68°F)	21 - 35°C (69 - 95°F)
Induction Time	2 hour	1 hour

Primer induction time if used with CA8800 or CA9000 Basecoat		
Mixing Instructions	Mix components CA7422A + CA7422B (4:4 by volume) Allow induction time then add CA7422C (final mix ratio by volume 4:4:1)	
Temperature	13 - 28°C (55 - 84°F)	29 - 35°C (85 - 95°F)
Induction Time	1 hour	30 minutes



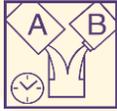
Viscosity: (23°C/73°F)

- #2 Signature Zahn cup 15 to 19 seconds
- #4 Ford cup 11 to 15 seconds
- ISO 3mm cup 31 to 50 seconds
- ISO 4mm cup 17 to 22 seconds
- BSB3 cup 24 to 30 seconds
- BSB4 cup 14 to 17 seconds
- AFNOR #2.5 cup 41 to 56 seconds
- AFNOR #4 cup 14 to 16 seconds

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



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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:

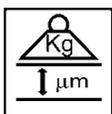
Ground the aircraft and the application equipment before priming. Stir the primer slowly while the primer is being applied. The suggested film thickness is 20 to 30 microns (0.8 to 1.2 mils). This can be accomplished by one medium coat with a 50% overlap. After applying primer, a close inspection is 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; 20 to 30 microns (0.8 to 1.2 mils)



Dry Film Density:

1.76 grams/cubic centimeter (14.66 pounds/gallon)

Dry Film Weight:

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

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Equipment:

CA7422 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: 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 ½ hours	1 hour	45 minutes
Dry to Tape	4 hours	3 hours	2 hours
Dry to Topcoat	3 - 72 hours	2 - 72 hours	1 ½ - 72 hours
Full Cure	7 days	7 days	7 days

Accelerated cure for dry hard:

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



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VOC

VOC:

Mixed, ready for use VOC (EPA method 24)	350 grams/liter
Base Component	382 grams/liter
Activator Component	258 grams/liter
Thinner Component	0 grams/liter



Flash point closed cup:

Base Component	16°C (60°F)
Activator Component	-4°C (24°F)
Thinner component	-9°C (15°F)

Shelf Life:

24 months from date of manufacture for PRC-DeSoto Standard.

Note: Shelf life is provided for the 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:

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