Technical Data Sheet Aerospace Coatings



Desoprime[™] CA7049 HS CF Epoxy Primer

Product Description

Desoprime[™] CA7049 is a three component, chromate free epoxy primer designed to protect exterior aircraft surfaces. CA7049 is suitable for application as a refresh primer over basic primers.

- Chromate free
- Corrosion inhibiting
- High solid, low VOC
- Excellent adhesion and fluid resistance
- Compatible with polyurethane and epoxy topcoats
- Service temperature -55°C to 177°C (-65°F to 350°F)

Components



Mix Ratio (by volume)

7049 (base component)
7049B1 (activator component)
7049CX (thinner component)
1 part
part

• 7049CRU (thinner component Irkut Spec Only) 1 part

Specifications



CA7049 manufactured in Europe is qualified to the following specifications:

7049E03125 (Yellow)

- AIMS 04-04-031
- AIMS 04-04-032
- AIMS 04-04-034
- AIMS 04-04-036
- AIMS 04-04-060
- AIMS 04-04-061
- AIMS 04-04-076
- AWMS 28-001
- DGQT 1.7.0.0121
- 741.140/21-00-00-0039-0T04

7049E01300 (Cream)

- AIMS 04-04-033
- AIMS 04-04-037

CA7049 manufactured in Mojave, CA is qualified to the following specifications:

• DGQT 1.7.0.0121

Product Compatibility

CA7049 is compatible with the following topcoat specifications:

- AIMS 04-04-012
- AIMS 04-04-013
- AIMS 04-04-025
- AIMS 04-04-032
- AIMS 04-04-060
- AIMS 04-04-061
- BAMS 565-009

- BMS 10-60 Type I and II
- DMS 2115
- DPM 6456
- MEP 10-069
- MIL-PRF-85285

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

Surface Preparation and Pretreatment



Ensure surface is clean, dry and intact, using a high performance cleaner. DeSoto[®] CN20 or Desoclean[™] 45 solvent cleaners are recommended. Observe recommended overcoating windows for primers and / or intermediate coat. Desoprime[™] CA7049 primer can be applied over composites, aluminum prepped with DesoGel[™] EAP-9, and chromic acid anodized aluminium.

Instructions for Use



Prior to mixing, mechanically shake the base component during 10-15 minutes until homogeneous. Stir the activator by hand. Add activator to base component and stir well, then add the thinner component while stirring. Maintain constant agitation for 10 minutes to ensure proper mixing.

Manufacture Site	Kit Yield	CA7049 Base	CA7049B1 Activator	CA7049CX Thinner	CA7049CRU Thinner
Europe	Sold as individual compone nts	5-Liter can filled @ 3.5 L	1-Liter can filled @ 1 L	1-Liter can filled @ 1 L	1-Liter can filled @ 1 L
U.S.	1.375 Gallons (5.2 Liters)	1-Gallon can filled @ 112 fluid oz.	1-Quart can filled @ 32 fluid oz	1-Quart can filled @ 32 fluid oz.	N/A

Note: All products and components should be placed in ambient conditions of 20 to 35°C (68 to 95°F) for at least 24 hours prior to mixing and application.



Induction Time:

Not required



Viscosity: (23°C/73°F)

•	AFNOR2.5	58 to 65 seconds
•	AFNOR4	17 to 21 seconds
•	BSB3	31 to 34 seconds
•	BSB4	18 to 20 seconds
•	#4 FORD	15 to 20 seconds
•	ISO3	51 to 64 seconds
•	ISO4	23 to 30 seconds
•	#2 SIGNATURE ZAHN	20 to 26 seconds



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

Pot Life:

2 hours @ 21 - 25°C (70 - 77°F)

Application Guidelines

Recommended Application Conditions:

Temperature 20 - 35°C (68 - 95°F)

Relative Humidity 20 - 80%

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 (0.8 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: (ready for use)

24 square meters/liter at 25 microns dry film (960 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:

1.9 grams/cubic centimeter(15.88 pounds/gallon)

Dry Film Weight:

48 grams/square meter at 25 microns dry film (0.0098 pounds/square feet at 1mil dry film)



Equipment:

CA7049 is compatible with most types of current spray equipment.

Equipment Type	Tip Size	Fluid Flow Rate	Atomization Air Pressure
HVLP (Siphon or Gravity Feed Cup)	1.2 mm	Not Applicable	22 to 29 psi (1.5 to 2 bar)
Conventional Air Spray(Siphon or Gravity Feed Cup)	1.5 mm	Not Applicable	44 to 72 psi (3 to 5 bar)
Conventional with Pressure Pot	1.2 to 1.5 mm	9-12 fl oz/min (266-355ml/min)	44 to 72 psi (3 to 5 bar)
HVLP with Pressure Pot	1.0 to 1.4 mm	9-12 fl oz/min (266-355ml/min)	22 to 29 psi (1.5 to 2 bar)
Airless		Not Recommended	
Electrostatic Air- Assisted Airless	#609 - #613 #709 - #713	9-12 fl. oz./min (266-355 ml/min)	40 to 80 psi
*Electrostatic Air Spray Gun (Low Pressure)	1.2 or 1.5mm	9.5 -10.8 fl oz /min (280-320 ml/min)	72 to 87 psi (5 to 6 bar)

^{*}Such as Graco 3500, 4500, XS and XP Series.

Equipment Cleaning:

Clean spray equipment before use and as soon as possible after use. Flush spray equipment with DeSoto[®] CN20, DeSoto[®] CN44 or Desoclean[™] 45 high performance solvent cleaner.

Physical Properties



Colour:

Yellow: 7049E03125 Cream: 7049E01300



Gloss:

Not Applicable



Dry Times at 22-28°C (71-84°F) 50% RH		
Dust Free	2-2.5 hours	
Dry to Handle	2-3 hours	
Dry to Tape	5-6 hours	
Dry to Sand	6 hours	
Dry to Overcoat with CA8620	4-72 hours	
Dry to Overcoat with F565-4010	3-12 hours	
Dry to Overcoat with F565E03110	5-12 hours	
Dry to Overcoat with CA8000 & CA8800	4-72 hours	
Dry to Overcoat with 9008	5-72 hours	
Full Cure	7 days	



Flash Off Time:

15 minutes prior to accelerated cure

Accelerated cure:

For Full Cure: Allow 15 minutes flash off at $24^{\circ}C \pm 3^{\circ}C$ (75°F \pm 10°F) followed by 24 hours at 60°C (140°F)

For Dry to Sand: Allow 15 minutes flash off at 24°C ± 3°C (75°F ± 10°F) followed by 60 minutes at 60°C (140°F)

For Dry to Overcoat with CA8000, CA8800 & 9008: Allow 15 minutes flash off at 24° C \pm 3° C (75° F \pm 10° F) followed by 30 minutes at 60° C (140° F).

Note: Drying times listed above are dependent upon film thickness applied, air flow conditions and application technique.



VOC: (ASTM D3960)

Mixed ready for use <350 grams/liter 7049 base component 215 grams/liter 7049B1 activator component 255 grams/liter 7049CX thinner component 790 grams/liter 7049CRU thinner component 800 grams/liter



Flash Point:

7049 base component	-3°C (27°F)
7049B1 activator component	27°C (81°F)
7049CX thinner component	-18°C (-0.4°F)
7049CRU thinner component	-18°C (-0.4°F)

Shelf Life:

12 months in original unopened container
12 months in original unopened container
24 months in original unopened container
10 Years in original unopened container

Note: Shelf life may vary due to OEM specification requirements. Refer to container label for specific shelf life information.

<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

ASC – Japan Tel 81 561 35 5200 Fax 81 561 35 5201

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PPG Aerospace Sealants and Coatings Darlington Road Shildon, Co Durham UK DL4 2QP

www.ppgaerospace.com

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