

Desoprime™ CA7049 HS CF Epoxy Primer

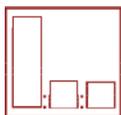
TECHNICAL DATA SHEET

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) | 3.5 parts |
| • 7049B1 (activator component) | 1 part |
| • 7049CX (thinner component) | 1 part |

Specifications



CA7049 manufactured in Europe is qualified to the following specifications:

- | | |
|------------------|------------------------------|
| • AIMS 04-04-031 | • AIMS 04-04-037 |
| • AIMS 04-04-032 | • AMS 3095 |
| • AIMS 04-04-033 | • AWMS 28-001 Type I Grade B |
| • AIMS 04-04-034 | • DGQT 1.7.0.0121 |
| • AIMS 04-04-036 | |

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 | • BMS 10-60 Type I and II |
| • AIMS 04-04-013 | • DMS 2115 |
| • AIMS 04-04-025 | • DPM 6456 |
| • AIMS 04-04-032 | • MEP 10-069 |
| • BAMS 565-009 | • MIL-PRF-85285 |

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

Desoprime™ CA7049 HS CF Epoxy Primer

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, DesoGel™ EAP-12 or chemical conversion coating conforming to MIL-DTL-5541, 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
Europe	Sold as individual components	5-Liter can filled @ 3.5 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.

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

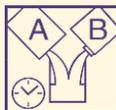


Viscosity: (23°C/73°F)

- 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.

Desoprime™ CA7049 HS CF Epoxy Primer



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.

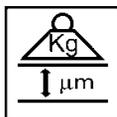
These application guidelines represent PPG's best advice in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables.



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)

Desoprime™ CA7049 HS CF Epoxy Primer



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



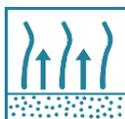
Gloss:

Not Applicable

Desoprime™ CA7049 HS CF Epoxy Primer



Dry Times at 22-28°C (71-84°F) 50% RH	
Dust Free	1 ½-2 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°C ± 3°C (75°F ± 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 ± 3°C (75°F ± 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

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

Desoprime™ CA7049 HS CF Epoxy Primer



Flash Point:

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

Shelf Life:

7049 base component	12 months in original unopened container
7049B1 activator component	12 months in original unopened container
7049CX thinner component	24 months in original unopened container

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

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™ CA7049 HS CF Epoxy Primer

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

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

Americas

1 (818) 362-6711 or 1-800-AEROMIX

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.

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

www.ppgaerospace.com

Issue Date: 05/17
Lit: 4200