# Technical Data Sheet Aerospace Coatings



# **CA7040 HS CF Polyurethane Primer**

# **Product Description**

CA7040 is a two pack chromate-free polyurethane primer suitable for application on aged alkyd coatings as well as on steel.

- High solids, low VOC
- Designed for use on military vehicle and equipment
- Suitable for application on suitably pretreated ferrous metal & specific non metallic substrates
- Overcoat with two pack epoxy & polyurethane topcoats

## **Components**



#### Mix Ratio (by volume)

CA7040 (Base) 4 partsCA7040B (Activator) 1 part

## **Specifications**



CA7040 is qualified to:

Def Stan 80-225 Type 1

#### **Product Compatibility**

CA7040 is compatible with the following topcoat specifications:

- BS2X34
- Def Stan 80-161
- Def Stan 80-225
- Mil-PRF-85285

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

# Surface Preparation and Pretreatment



Ensure that the correct surface pre-treatment has been carried out. Ensure the surface is clean, dry and intact using a high performance solvent cleaner - DeSoto<sup>®</sup> CN20 or Desoclean<sup>™</sup> 45 solvent cleaners are recommended.

## **Instructions for Use**



Base material may require mechanical agitation. Ensure all components are adequately dispersed. Add activator to base component and stir thoroughly before use.

Note: All products and components should be placed in ambient conditions of 15-30°C (59-86°F) for at least 24 hours prior to mixing and application.



#### **Induction Time:**

Not required



Viscosity: (23°C/73°F)

•	AFNOR4	31-40 seconds
•	FORD4	30-37 seconds
•	ISO4	68-93 seconds
•	ISO5	30-40 seconds
•	ZAHN2	40-49 seconds



#### Pot Life:

1.5 hours @ 21 - 25°C (70 - 77°F)

# **Application Guidelines**

#### **Recommended Application Conditions:**

Temperature 15 - 35°C (50 - 95°F) Relative Humidity 30 - 85%

#### Application:

Apply one cross coat to achieve recommended dry film thickness



Theoretical Coverage: (ready for use)

18 m<sup>2</sup> Lt @ 40 μm dry film thickness 720 ft<sup>2</sup> US gal @ 1.6 mil dry film thickness

#### **Recommended Dry Film Thickness:**

35 - 45 µm 1.4 - 1.8 mil



#### **Dry Film Density:**

1.84 g/cm<sup>3</sup> 15.3 lbs /US gal

#### **Dry Film Weight:**

73 g/m<sup>2</sup> @ 40 µm dry film thickness 0.015 lbs/ft<sup>2</sup> @ 1.6 mil dry film thickness

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

#### **Equipment:**



Equipment Type	Tip Size	Pressure
Airmix	6/13	29 to 51 psi (2 to 3.5 bar)
HVLP Air Spray	1.8 to 2.0 fluid tip	
Pressure Pot	1.0 to 1.2mm	29 to 43 psi (2 to 3 bar)
Airless	6/11	870 psi (60 bar)
Air-assisted Airless Electrostatic	6/11	870 psi (60 bar)
Low Pressure Electrostatic	1.0 to 1.2mm	43 to 72 psi (3 to 5 bar)

#### **Equipment Cleaning:**

Clean spray equipment before use and as soon as possible after use. DeSoto® CN20 or CN44 solvent cleaners are recommended



Small areas can also be brush applied

# **Physical Properties**



Colour:

Grey



Gloss:

<25 units with a 60° gloss meter



Drying Times	23°C (73°F)	40°C (104°F)	60°C (140°F)
Touch Dry	1 hour	30 minutes	20 minutes
Dry to Tape	3 hours	1.5 hours	1 hour
Dry to Overcoat	1 hour	30 minutes	20 minutes
Dry to Sand	3 hours	1.5 hours	1 hours
Full Cure	7 days	24 hours	3 hours

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



#### Flash Off Time:

15 minutes between coats or before force drying



#### **Special Note:**

For wet on wet scheme, overcoat after 1 hour



#### VOC: (ASTM)

Mixed ready for use	<250 g/Lt
CA7040 Base Component	295 g/Lt
CA7040B Activator	0 g/Lt



#### Flash Point:

CA7040 Base Component	20°C (64°F)
CA7040B Activator	65°C (77°F)

#### Shelf Life:

CA7040 Base Component	24 months in original unopened container
CA7040B Activator	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.

## **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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