# Technical Data Sheet Aerospace Coatings



# **Celoflex™ 95 Erosion Resistant Polyurethane Topcoat**

# **Product Description**

Celoflex<sup>™</sup> 95 is a polyurethane topcoat designed to provide erosion resistance on radomes and leading edges. Celoflex<sup>™</sup> 95 is intended for use on non-metallic / metallic parts and areas exposed to rain erosion.

- Excellent fluid and erosion resistance
- Conventional solids
- Excellent UV resistance

## **Components**



## Mix Ratio (by volume)

•	5478/ (Base)	1 part
•	0778/9000 (Activator)	1 part
•	0470/9000 (Thinner)	0.5 - 1 part

# **Specifications**



5478/.... is qualified to:

AIMS 04-04-016

5478/.... is compatible with the following primer / topcoat specifications:

- AIMS 04-04-005
- AIMS 04-04-012
- AIMS 04-04-013
- AIMS 04-04-031
- AIMS 04-04-032

- BAMS 565-09
- BLGG 140301
- BMS 10-60
- BMS 10-72
- BS2X34B
- DHMS C4.04

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

## **Surface Preparation and Pretreatment**



Apply over a suitably prepared primer/surfacer. Ensure 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. Observe recommended overcoating windows.

## **Instructions for Use**



Before adding the activator to the base, thoroughly stir or shake the base component until a smooth uniform mix is obtained. Immediately after adding the activator to the base, stir thoroughly then add required thinner while stirring.

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	15 - 21 seconds
•	BSB3	31 - 42 seconds
•	FORD4	11 - 17 seconds
•	ISO4	25 - 40 seconds
•	ZAHN2	21 - 28 seconds

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



#### Pot Life:

3 hours @ 21 - 25°C (70 - 77°F)

# **Application Guidelines**

## **Recommended Application Conditions:**

Temperature 15 - 30°C (59 - 86°F)

Relative Humidity 30 - 80%

## Application:

Apply 2 or 3 coats. Wait 30 minutes between coats.



Theoretical Coverage: (ready for use)

3 m<sup>2</sup>/Lt @ 100 µm dry film thickness 120 ft<sup>2</sup>/US gal @ 4 mil dry film thickness

## **Recommended Dry Film Thickness:**

80 - 120 μm 3.2 - 4.8 mil



## **Dry Film Density:**

1.26 g/cm<sup>3</sup> 10.4 lbs/US gal

Dry Film Weight: (mix ratio 1:1:1)

126 g/m<sup>2</sup> @ 100 µm dry film thickness 0.025lbs/ft<sup>2</sup> @ 4 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 (mm)	Pressure
Conventional Air Spray	1.5 to 1.8	43 to 72 psi (3 to 5 bar)

## **Equipment Cleaning:**

Clean spray equipment before use and as soon as possible after use. DeSoto<sup>®</sup> CN20, CN44 or Desoclean<sup>™</sup> 45 solvent cleaners are recommended.

## **Physical Properties**



#### Colour:

White (5478/0000)
Brilliant Dark Grey/Blue (5478/2723)
Medium Blue/Light Grey (5478/2182)
Black (5478/2909)



#### Gloss:

>90 units with a 60° gloss meter



Drying Times @ 50% R.H	@ 23°C (73°F)	@ 80°C (176°F)
Dry to Handle	4 hours	90 minutes
Dry to Tape	12 hours	-
Dry to Overcoat	4 to 24 hours	-
Full Cure	7 days	3 to 4 hours

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



#### Flash Off Time:

30 minutes @ 23°C (73°F) prior to force drying @ 80°C (176°F)



## VOC: (ASTM)

 Mixed (1:1:1) ready for use
 550 g/Lt

 5478/0000 Base Component
 180 g/Lt

 0778/9000 Activator
 620 g/Lt

 0470/9000 Thinner
 850 g/Lt



### **Flash Point:**

5478/0000 Base Component 2°C (36°F) 0778/9000 Activator 23°C (73°F) 0470/9000 Thinner 1°C (34°F)

#### Shelf Life:

5478/0000 Base Component 12 months in original unopened container 0778/9000 Activator 12 months in original unopened container 0470/9000 Thinner 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. 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
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numbers listed below:

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