5447 PU66 8H Topcoat Gloss Summer Version

Product Description

5447 is a two-component flexible polyurethane topcoat of the PU66 range. This summer version is designed to be applied in extreme conditions of humidity and temperature, commonly applied @ >30°C and 80% R.H.
5447 is designed for the internal/external protection and decoration of aircraft.

- Conventional solids
- Resistance to filiform corrosion
- Excellent fluid resistance including synthetic and mineral lubricants, phosphate-ester hydraulic fluids
- Outstanding UV and long term durability

Components

Mix Ratio (by volume)

• 5447/….(Base)	1 part
• 0730/9000(Activator)	1 part
• 0491/9000 (Thinner)	to viscosity (refer to viscosity section of this document)

Specifications

5447 is qualified to:

- AIMS 04-04-012 (Limited Colours)
- BLGG 140301
- RRJ0000-RE-314-528/B

5440 meets the performance requirements of:

- Mil-PRF-85285

Product Compatibility
5447 is compatible with the following primer/topcoat specifications :

- AIMS 04-04-002
- AIMS 04-04-003
- AIMS 04-04-011
- AIMS 04-04-077
- AIMS 04-04-078
- ASNA 4251
- BLGG 0900101
- AIMS 04-04-012

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

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Surface Preparation and Pretreatment

Ensure surface is clean, dry and intact using a high performance solvent cleaner - DeSoto® CN20 or Desoclean™ 45 solvent cleaners are recommended. Observe recommended over coating windows for primers. For further information refer to the technical data sheet for the relevant primers.

Instructions for Use

Base component may require mechanical agitation. Ensure all components are adequately dispersed. Before adding the activator to the base, thoroughly stir or shake the base component until a smooth uniform mix is obtained. Slowly add activator to base while stirring, then add required thinner while stirring.

Note: All products and components should be placed in ambient conditions of 15-35°C (59-95°F) for at least 24 hours prior to mixing and application.

Induction Time:

Not required

Viscosity: (21 - 25°C / 70 - 77°F)

• AFNOR 2.5	45 - 55 seconds
• AFNOR4	14 - 16 seconds
• BSB3	16 - 32 seconds
• BSB4	15 - 19 seconds
• FORD4	13 - 16 seconds
• ISO3	41 - 59 seconds
• ISO4	19 - 27 seconds
• ZAHN2	16 - 21 seconds

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

Pot Life:

8 hours @ 21 - 25°C (70 - 77°F)

Application Guidelines

Recommended Application Conditions:

Temperature	30 - 35°C (86 - 95°F)
Relative Humidity	30 - 85%

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Application:

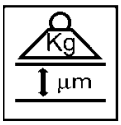
Apply 2 cross coats to achieve the recommended dry film thickness.

Theoretical Coverage: (unthinned)

6 - 8 m²/Lt @ 40 µm dry film thickness
240 - 320 ft²/US gal @ 1.6 mil dry film thickness

Recommended Dry Film Thickness:

30 - 50 µm
1.2 - 2 mil



Dry Film Density:

1.2 - 1.6 g/cm³ (depending on colour)
10.2 - 13.3 lbs/US gal

Dry Film Weight:

47 - 64 g/m² @ 40 µm dry film thickness
0.009 - 0.013 lbs/ft² @ 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 (mm)	Pressure
HVLP Air Spray	1.2	22 to 29 psi (1.5 to 2 bar)
Pressure Pot	1.5	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 Desoclean™ 45 solvent cleaners are recommended.

Physical Properties

Colour:

This product is available in a wide range of colours. Please contact PPG Aerospace to discuss specific requirements.

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Gloss:

>90 units with a 60° gloss meter

DRYING TIMES @ 50 % R.H	30°C (86°F)	60°C (140°F)	80°C (176°F)
Dust Free	1.5 to 2 hours		
Dry to Handle	4 to 5 hours		
Dry to Tape	6 to 8 hours	30 minutes	
Dry to Sand	8 to 10 hours		
Dry to Overcoat	1 hour (min.) 72 hours (max.)	15 minutes	
Full Cure	7 to 9 days	4 hours	2 hours

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

Flash Off Time:

15 - 30 minutes @ 23 ± 2°C prior to force dry.

VOC: (ASTM)

Mixed ready for use (unthinned)	<640 g/Lt
5447 Base Component	<470 g/Lt
0730/9000 Activator	705 g/Lt
0491/9000 Thinner	840 g/Lt

Flash Point:

5447 Base Component	16°C (80°F)
0730/9000 Activator	13°C (55°F)
0491/9000 Thinner	-2°C (28°F)

Shelf Life:

5447 Base Component	24 months in original unopened container
0730/9000 Activator	24 months in original unopened container
0491/9000 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

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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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ASC – Japan
Tel 81 561 35 5200
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