

# **TECHNICAL DATA SHEET**

## **Product Description**

5461 is a two-component flexible polyurethane topcoat of the PU66 range, designed for internal / external protection and decoration of aircraft structures.

- Conventional solids
- Excellent fluid resistance including Skydrol® hydraulic fluid
- Oustanding UV resistance & long term durability

## **Components**



### Mix Ratio (by volume)

5461/.... (Base)0730/9000 (Activator)1 part

• 0491/9000 (Thinner) to viscosity (refer to viscosity section of this document)

## **Specifications**



5461 is qualified to:

- BLGG 140301
- MDL 5041

5461 meets the performance requirements of:

MIL-PRF-85285

#### **Product Compatibility**

5461 is compatible with the following primer specifications:

- AIMS 04-04-001
- AIMS 04-04-002
- AIMS 04-04-003

- BLGG 900101
- RPS 661-2
- S27-7004

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 solvent cleaner - DeSoto® CN20 or Desoclean™ 45 solvent cleaners are recommended. Observe recommended over coating window for primers. For further information, refer to the technical data sheets of 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 15-30°C (59-86°F) for at least 24 hours prior to mixing and application.



#### **Induction Time:**

Not required

Viscosity: (23°C/73°F)

<ul> <li>AFNOR2.5</li> </ul>	45 - 55 seconds
<ul> <li>AFNOR4</li> </ul>	14 - 16 seconds
• BSB3	23 - 30 seconds
• BS4	18 - 20 seconds
• FORD4	13 - 15 seconds
• ISO3	30 - 50 seconds
• ISO4	17 - 22 seconds
• ZAHN2	15 - 20 seconds

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



#### Pot Life:

4 hours @ 21 - 25°C (70 - 77°F)

## **Application Guidelines**

### **Recommended Application Conditions:**

Temperature 15 - 35°C (59 - 95°F)

Relative Humidity 30 - 85%



### Application:

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



**Theoretical Coverage:** (ready for use unthinned)

6 - 8 m²/Lt @ 40 μm dry film thickness240 - 320 ft²/US gal @ 1.6 mil dry film thickness

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

30 - 50 μm 1.2 - 2 mil



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

1.4 - 1.6 g/cm³ (depending on colour) 11.6 - 13.3 lbs/US gal

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

50 -  $65~g/m^2~@$   $40~\mu m$  dry film thickness 0.010 -  $0.013~lbs/ft^2~@$  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:**



<b>Equipment Type</b>	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<sup>®</sup> CN20, CN44 or Desoclean<sup>™</sup> 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.





#### Gloss:

20 - 45 units with a 60° gloss meter.



DRYING TIMES @ 50 % R.H	23°C (73°F)	60°C (140°F)
Dust Free	2 hours	
Dry to Handle	5 hours	
Dry to Tape	8 hours	30 minutes
Dry to Overcoat	1 hour (min.) (72 hours max.)	15 minutes
Full Cure	7 days	

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



#### Flash Off Time:

15 - 30 minutes prior to force dry.



#### VOC: (ASTM)

Mixed ready for use	>600 g/Lt
5461 Base Component	460 g/Lt
0730/9000 Activator	705 g/Lt
0491/9000 Thinner	840 g/Lt



#### **Flash Point:**

5461 Base Component	2°C (70°F)
0730/9000 Activator	13°C (55°F)
0491/9000 Thinner	-2°C (28°F)

#### Shelf Life:

5461 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.



## **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

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