

# 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)
- 0491/9000 (Thinner)

1 part

- 1 part
- 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**

AIMS 04-04-002

5461 is compatible with the following primer specifications:

• AIMS 04-04-001

- BLGG 900101
- RPS 661-2
- AIMS 04-04-003
- S27-7004

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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<sup>®</sup> CN20 or Desoclean<sup>™</sup> 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)

- AFNOR2.5
  AFNOR4
  BSB3
  BS4
  FORD4
  ISO3
  ISO4
  45 55 seconds
  45 16 seconds
  23 30 seconds
  18 20 seconds
  30 50 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)

<mark>6 - 8 m</mark>²/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:**

1.4 - 1.6 g/cm<sup>3</sup> (depending on colour) 11.6 - 13.3 lbs/US gal

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

50 - 65 g/m<sup>2</sup> @ 40  $\mu m$  dry film thickness 0.010 - 0.013 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 (mm) | Pressure                       |
|----------------|---------------|--------------------------------|
| HVLP Air Spray | 1.2           | 22 to 29 psi<br>(1.5 to 2 bar) |
| Pressure Pot   | 1.5           | 43 to 72 psi<br>(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.)<br>(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 0730/9000 Activator 0491/9000 Thinner 24 months in original unopened container 24 months in original unopened container 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

**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

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

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**ASC – Central Europe** Tel 49 (40) 742 193 10 Fax 49 (40) 742 139 69

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www.ppgaerospace.com Issue Date: 04/18 Lit: 4203