

TECHNICAL DATA SHEET

Product Description

5440 is a two component polyurethane topcoat of the PU66 range, designed for the internal / external protection and decoration of aircraft structures.

- Conventional solids
- Excellent fluid resistance including Skydrol, hydraulic fluids
- Outstanding UV and long term durability

Components

Mix Ratio (by volume)

Component Ref.	Spray Application	Brush Application	
5440/ (Base)	1	5	
07309000 (Activator)	1	NOT APPLICABLE	
07079000 (Activator)	NOT APPLICABLE	2	
04919000 (Thinner)	TO VISCOSITY	NOT APPLICABLE	

Specifications



5440 is qualified to:

- AIMS 04-04-003
- AIMS 04-04-012
- ASNA 3626
- ASNA 4247
- BLGG 140301
- HMDC0055
- HMRC0060
- MDL 5041

5440 meets the performance requirements of:

Mil-PRF-85285

Product Compatibility

5440 is compatible with the following primer specifications:

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



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 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 (spray application only) 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: (21 - 25°C / 70 - 77°F)

45 - 55 seconds
14 - 16 seconds
23 - 30 seconds
18 - 20 seconds
13 - 15 seconds
30 - 50 seconds
17 - 22 seconds
15 - 20 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 15 - 35°C (59 - 95°F)

Relative Humidity 30 - 85%

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 μ m 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)



5440 can also be applied by brush (refer mix ration table).

Equipment Cleaning:

Clean application 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.



Gloss:

>90 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 to 9 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 (unthinned)
 <600 g/Lt</td>

 5440 Base Component
 <500 g/Lt</td>

 0730/9000 Activator
 705 g/Lt

 0707/9000 Brush Activator
 460 g/Lt

 0491/9000 Thinner
 840 g/Lt



Flash Point:

5440 Base Component 26°C (79°F) 0730/9000 Activator 13°C (55°F) 0707/9000 Brush Activator 50°C (122°F) 0491/9000 Thinner -2°C (28°F)



Shelf Life:

5440 Base Component24 months in original unopened container0730/9000 Activator24 months in original unopened container0707/9000 Brush Activator24 months in original unopened container0491/9000 Thinner10 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

Desoclean and DeSoto are trademarks of PRC-DeSoto International, Inc.

All recommendations, statements, and technical data contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. User shall rely on his own information and tests to determine suitability of the product for the intended use and assumes all risks and liability resulting from his use of the product. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss, or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer or seller.

Europe and Middle East

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

ASC – Middle East & India Tel (971) 4 883 9666 Fax (971) 4 883 9665 **ASC – North Europe** Tel 44 (0) 1388 770222 Fax 44 (0) 1388 770288

ASC – South Europe Tel 33 (0) 235 53 43 71 Fax 33 (0) 235 53 54 44

> PPG Aerospace Sealants and Coatings Darlington Road Shildon, Co Durham UK DL4 2QP

www.ppgaerospace.com

Issue Date: 06/18 Lit: 4209