Technical Data Sheet Aerospace Coatings



4125 Direct Adhesion Epoxy Coating

Product Description

4125 epoxy coating is designed for the protection of fasteners used in aircraft assemblies including all types of rivets, nuts, fasteners or aluminium alloys.

- Two pack, direct adhesion epoxy topcoat
- Applicable with all types of fasteners
- Excellent adhesion properties

Components



Mix Ratio (by volume)

4125 (Base)
0613/9000 (Activator)
0580/9000 (Thinner)
2 parts
1 part
to viscosity

Specifications



4125 is qualified to:

- 75-T-2-5721-3-1
- ASNA 4285 (41252047 Grey Only)
- DAN 1174 (41252047 Grey Only)
- HMDC 0031
- HMRC 0069

4125 meets the performance requirements of:

AIMS 04-04-009

• ASN-B-707205P

AIMS 04-04-010

BLGG 120001

AIMS 04-04-043

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 cleaner are recommended. Abrade the surface using Scotch-Brite® pad and degrease with MEK before application.

Instructions for Use



Base component may require mechanical agitation. Ensure all components are adequately dispersed. Add activator to base component and stir well, adjust to recommended viscosity by addition of 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 | 53 - 64 seconds |
|---|----------|-----------------|
| • | AFNOR4 | 16 - 18 seconds |
| • | BSB3 | 29 - 33 seconds |
| • | BSB4 | 16 - 19 seconds |
| • | FORD4 | 14 - 16 seconds |
| • | ISO3 | 48 - 63 seconds |
| • | ISO4 | 21 - 29 seconds |
| • | ZAHN2 | 19 - 21 seconds |
| | | |

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



Pot Life:

8 hours @ 21 - 25°C (70 - 77°F) with 1 volume of thinner.

Application Guidelines

Recommended Application Conditions:

Temperature 15 - 35°C (59 - 95°F)

Relative Humidity 30 - 85%

Application:

Apply 1 - 2 even cross coats to achieve recommended dry film thickness.



Theoretical Coverage: (ready for use unthinned)

14 m²/Lt @ 30 μm dry film thickness 560 ft²/US gal @ 1.2 mil dry film thickness

Recommended Dry Film Thickness:

20 - 40 µm 0.8 - 1.6 mil



Dry Film Density:

1.6 g/cm³ 13 lbs/Usgal

Dry Film Weight:

48 g/m² @ 30 μm dry film thickness 0.009 lbs/ft² @ 1.2 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 | 35 to 36 psi (1.5 to 2 bar) |
| Conventional Air Spray | 1.5 | 37 to 39 psi (3 to 4 bar) |

Equipment Cleaning:

Clean spray equipment and as soon as possible after use. DeSoto[®] CN20 or Desoclean[™] 45 solvent cleaners are recommended.

Physical Properties



Colour:

Grey M09001 (4125/2047) Light Blue (4125/6407) RAL 1020 Green (4125/5171) GAM-C-2625 Grey (4125/2182)



Gloss:

Semi Gloss: 20 - 45 units with a 60° gloss meter



| Drying Times 50% R.H | 23°C (73°F) | 70°C (158°F) |
|----------------------|-------------------------------------|--------------|
| Dry to Touch | 30 minutes | |
| Dry to Handle | 2 hours | |
| Dry to Tape | 3 hours | |
| Dry to Overcoat | 0.5 hours (min.) 72 hours (max.) | |
| Full Cure | 7 days | 3 hours |

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



Flash Off:

15 minutes before force dry



VOC: (ASTM)

| 475-575 g/Lt |
|--------------|
| 380 g/Lt |
| 675 g/Lt |
| 870 g/Lt |
| |



Flash Point:

| 4125 Base Component | <21°C (70°F) |
|---------------------|--------------|
| 0613/9000 Activator | <21°C (70°F) |
| 0580/9000 Thinner | <21°C (70°F) |

Shelf Life:

| 4125 Base Component | 24 months in original unopened container |
|---------------------|--|
| 0613/9000 Activator | 24 months in original unopened container |
| 0580/9000 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:

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