

EC96 HS Epoxy Topcoat

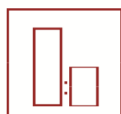
TECHNICAL DATA SHEET

Product Description

EC96 Epoxy Finish possesses excellent adhesion and high chemical resistance. This combination makes it an ideal topcoat to enhance the protection of either epoxy or polyurethane primers used on the internal structure of aircraft.

- Two pack, ambient curing
- High solids, low VOC
- High resistance to aircraft fluids including phosphate ester hydraulic fluids

Components



Mix Ratio (by volume)

- EC96/.... (Base) 2 parts
- ACT196 (Activator) full gloss 1 part



- EC96/....(Base) 1 part
- ACT197 (Activator) near matt 1 part

- EC96/.... (Base) 1 part
- ACT199 (Activator) matt 1 part

Specifications



EC96 is qualified to:

- DEF STAN 80-161
- MSRR9064

Product Compatibility

EC96 can be applied over the following primer specifications:

- Def Stan 80-206
- Def Stan 80-207
- BS2X33 A+B
- Def Stan 80-189
- Def Stan 80-216

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

EC96 HS Epoxy Topcoat

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 overcoat window for primers.

Instructions for Use



Hand stir or mechanically shake base material until all pigments are uniformly dispersed. Add activator to appropriate volume of base, depending on required gloss level;

Gloss Finish Add 1 volume activator to 2 volumes base

Near Matt & Matt Finish Add 1 volume activator to 1 volume base

Stir thoroughly to ensure a smooth uniform consistency.

DO NOT ADD ANY THINNER.

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



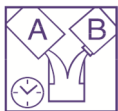
Viscosity: (23°C/73°F)

• AFNOR2.5	56 - 80 seconds
• AFNOR4	16 - 20 seconds
• BSB3	30 - 40 seconds
• BSB4	17 - 23 seconds
• FORD4	15 - 19 seconds
• ISO4	22 - 38 seconds
• ZAHN2	20 - 25 seconds

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

Do not add any thinner of any type.

Other than record purposes, it is not necessary to check the initial mix viscosity.



Pot Life:

4 hours @ 21-25 °C (70-77 °F)

EC96 HS Epoxy Topcoat

Application Guidelines

Recommended Application Conditions:

Temperature	15-35 °C (59-95 °F)
Relative Humidity	30-85 %

Application:

Apply 1-2 double-track or cross-coats, sufficient to achieve the recommended dry film thickness.



Theoretical Coverage:

Gloss Finish - ACT196 (2:1 mix ratio)

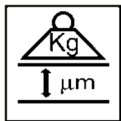
- 25 m²/Lt @ 25 µm dry film thickness (1000 f²/US gal @ 1 mil dry film thickness)

Matt Finish - ACT199 (1:1 mix ratio)

- 23 m²/Lt @ 25 µm dry film thickness (920 f²/US gal @ 1 mil dry film thickness)

Recommended Dry Film Thickness:

20 - 30 µm
0.8 - 1.2 mil



Dry Film Density: (White)

Gloss Finish - ACT196 (2:1 mix ratio)

- 1.89 g/cm³ (15.78 lbs/US gal)

Matt Finish - ACT199 (1:1 mix ratio)

- 2.12 g/cm³ (17.72 lbs/US gal)

Dry Film Weight: (White)

Gloss Finish - ACT196 (2:1 mix ratio)

- 47 g/m² @ 25 µm dry film thickness (0.0096 lbs/ft² @ 1 mil dry film thickness)

Matt Finish - ACT199 (1:1 mix ratio)

- 53 g/m² @ 25 µm dry film thickness (0.0108 lbs/ft² @ 1 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.

EC96 HS Epoxy Topcoat

Equipment: EC96 is compatible with all current types of spray equipment.



Equipment Type	Tip Size	Pressure
Airmix	11 to 13 thou	29 to 43 psi (2 to 3 bar)
HVLP Air Spray	1.0 to 1.8 mm	29 to 43 psi (2 to 3 bar)
Pressure Pot	1.0 to 1.4 mm	14 to 39 psi (1 to 2 bar)
Airless	Not Recommended	
Air-assisted Electrostatic	11 to 13 thou	43 to 72 psi (3 to 5 bar)
Low Pressure Electrostatic	1.0 to 1.2 mm	43 to 72 psi (3 to 5 bar)

Equipment Cleaning:

Clean spray equipment before use and as soon as possible after use. DeSoto® CN20, CN44 or Desoclean™ 45 solvent cleaners are recommended.

Physical Properties



Colour:

Wide range of colours available



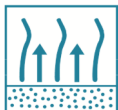
Gloss:

- Gloss: >85 units with a 60° gloss meter
- Matt: <5 units with a 60° gloss meter



Drying Times 50 % Relative Humidity	23 °C (73 °F)	60 °C (140 °F)
Dry to Mask	10 to 12 hours	
Dry to Fly	48 hours	
Hard Dry	<16 hours	30 minutes
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)

EC96 HS Epoxy Topcoat

Mixed ready for use	<420 g/Lt
EC96 Base Component	300-330 g/Lt
ACT196 Activator	480 g/Lt
ACT199 Activator	505 g/Lt

**Flash Point:**

EC96 Base Component	27 °C (81 °F)
ACT196 Activator	25 °C (77 °F)
ACT199 Activator	25 °C (77 °F)

Shelf Life:

EC96 Base Component	24 months in original unopened container
ACT196 Activator	24 months in original unopened container
ACT199 Activator	24 months in original unopened container

Note: Shelf life may vary due to OEM specification requirements. Refer to container label for specific shelf life information.

Note: 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.



EC96 HS Epoxy Topcoat

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

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

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.

PPG Aerospace
Sealants and Coatings
Darlington Road
Shildon, Co Durham UK
DL4 2QP
www.ppgaerospace.com
Issue Date: 07/14
Lit: 4207