

Anti-static Conductive Flat Black Epoxy Coating

Technical Data Sheet

Product Group

Conductive epoxy coating

Characteristics



Product Information This epoxy coating is designed to produce an anti-static conductive film on fiberglass components. It can be air cured or force dried.

Components



Curing Solution

Curing Solution: EC-110

Specifications



Qualified Product List Avic Aviation AMMS2504

Boeing BMS 10-21 Type III BAMS 565-012, Ty III

Bombardier/Shorts WP143

Comac CMS-CT-223, TY II

EADS (CASA) Z-12.506/BMS 10-21, Ty III

Embraer MEP 10-053, Ty II
Gulfstream Aerospace GMS 5003, TY I CL 2

LearJet LES 1231 Northrop Grumman P-P502 TRW MT6-12A1

United Launch Alliance STM 37-510, TY III CL 2 Lockheed Martin STM 37-510 Type III, Class II

For most recent up-date or missing specifications please check the qualified product list (QPL) on www.akzonobel.com/aerospace

Surface Conditions



Cleaning

- Surface pretreatment is an essential part of the painting process.
- Follow the specification requirements for cleaning and pretreatment application.

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Instruction for Use



Mixing Ratio (volume)

3 parts 1 part Base 10P2-3

Curing Solution EC-110

- Stir or Shake until all pigment is uniformly dispersed before adding curing solution.
- Stir the catalyzed mixture thoroughly.



Induction Time

30 minutes



Initial Spraying Viscosity (25°C/77°F) 25 - 35 seconds ISO-Cup 4

16 - 20 seconds Signature Zahn-Cup #2

15 ± 3 seconds Ford Cup #4



Note

Viscosity measurements are provided as guidelines only and are not to be used as quality control parameters. Certified information is provided by certification documentation available on request.



Pot life (25°C/77°F) 4 hours min to 8 hour max



Dry Film Thickness (DFT) 15 - 25 micron (μ m) 0.6 - 1.0 mils

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Application Recommendations



Conditions

Temperature: 15 – 35°C

59 - 95°F

Relative Humidity: 35 – 75%



Note

The quality of the application of all coatings will be influenced by the spray equipment chosen and the temperature, humidity, and air flow of the paint application area. When applying the product for the first time, it is recommended that test panels be prepared in order to identify the best equipment settings to be used in optimizing the performance and appearance of the coating.



Equipment

Air 1.2 – 1.4 mm nozzle orifice HVLP 1.2 – 1.4 mm nozzle orifice

High Pressure

Airless Electrostatic 0.23 – 0.28 mm nozzle orifice



Number of Coats

Spray a single uniform wet coat to recommended dry film thickness



Cleaning of Equipment

Use MEK

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Physical Properties



Drying Times (25 +/- 2°C / 77 +/- 2°F, 55 +/-5% RH)

Dry to dust 15 minutes
Tack Free 1 hour
Dry to tape 2 hours

Force cure 15' – 30' flash, then 30' to 45' @ 140°F



Theoretical Coverage 7.0 m^2 per liter ready to apply at 25 μm dry film thickness 285 ft² per US gallon ready to apply at 1 mil dry film thickness



Dry Film Weight

 $38.5 \text{ g/m}^2/\text{ at } 25 \text{ }\mu\text{m} \text{ micron } 0.008 \text{ lbs/ft}^2/\text{ at } 1.0 \text{ mil}$

Surface Resistivity

0.0 - 100,000 Ohms / square (<5000 ohms/square typical)



Volatile Organic Compounds Max 684 g/l Max 5.7 lb/gal



Gloss (60°)

30 maximum



Color

Flat black



Flash-point

10P2-3 EC-110 -5°C / 23°F 7.2°C / 45°F

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Storage

Store the product dry and at a temperature between 5 and 38°C / 40 and 100°F per AkzoNobel Aerospace Coatings specification. Store in the original unopened containers. Storage temperature may vary per OEM specification requirements. Refer to container label for specific storage life information.

Shelf life 5 - 38°C (40 - 100°F) 12 months per AkzoNobel Aerospace Coatings commercial specification. Shelf life may vary due to OEM specification requirements. Refer to container label for specific shelf life information.

Safety Precautions

Comply with all local safety, disposal and transportation regulations. Check the Material Safety Data Sheet (MSDS) and label of the individual products carefully before using the products. The MSDS's are available on request.

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IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person of the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the products supplied and technical advice given is subject to our standard terms and conditions of sale. You should request a copy of this document and review it carrefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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