AkzoNobel Aerospace Coatings

Eclipse[®] ECL-G-857

Polyurethane Diamond Ice Mica Base



Product Group

VOC compliant polyurethane Mica Intermediate coat for three coat application

ECL-G-11XXX ECL-G-857

ECL-G-2 or ECL-G-7

Characteristics



Product Information

- A chemically cured, long life mica base coat designed to provide a uniform metallic appearance. This coating has a balanced formulation to provide superior chemical and stain resistance, flexibility and weathering performance. When used with AkzoNobel Aerospace Coatings primers 10P20-44MNF (BMS 10-72 Type IX) or 10P20-12 (DMS 2104), the corresponding base coat for the required color and Eclipse Clear, ECL-G-2 or ECL-G-7 this system provides a durable long lasting, protective and decorative finish that exceeds typical OEM requirements for exterior aircraft performance.

Components



Curing Solution

Curing Solution PC-233

Specifications



Qualified Product

Boeing BMS 10-72, TY IX Bombardier BAMS 565-009, TY

Bombardier BAMS 565-009, TY I, GR B Bombardier/deHavilland DHMS C4.04, TY 6, CL B, GR B

Embraer MEP 10-069

The complete AkzoNobel Aerospace Coatings qualified product list (QPL) can be found at: www.akzonobel.com/aerospace

Surface Conditions



Cleaning

Surface pretreatment is an essential part of the painting process.

Instruction for Use



Mixing Ratio (volume)

2 parts Base ECL-G-857 1 part Curing Solution PC-233

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

Page 1 of 4

AkzoNobel Aerospace Coatings

Eclipse[®] ECL-G-857

Polyurethane Diamond Ice Mica Base





Induction Time

15 minutes



Initial Spraying Viscosity (25°C/77°F) 17 – 23 seconds Zahn-Cup 2



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) 3 hours.



Dry Film Thickness (DFT)

Solid base coat only

25 - 46 microns (μ m) 1.0 - 1.8 mils

Intermediate mica coat only

38 - 46 microns (μ m) 1.5 - 1.8 mils

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 055-.072 mm nozzle orifice
HVLP 1.4-1.8 mm nozzle orifice
Air spray Electrostatic 1.4-1.8 mm nozzle orifice
Airless Electrostatic Not recommended



Number of coats

Apply in a cross coat pattern (2- 3 coats) of material to a wet film thickness of 3.0-3.5 mils to result in a dry film of 1.5-1.8 mils

Eclipse[®] ECL-G-857

Polyurethane Diamond Ice Mica Base





Cleaning of Equipment Solvent Cleaning C28/15 or TR-15 (electrostatic equipment) Solvent Cleaning C28/15 or TR-19 for other spray equipment.

Physical Properties



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

Dry to dust Dry to tape Full cure 4-5 hours N/A

This coating must be clear coated before full cure

is established

Recoatable minimum 1 hour Recoatable maximum 24 hour



Note Drying Times Time between basecoat and mica coat: 2 hours or dry to touch (no transfer)

Flash time between Coats: 30-45 minutes



Theoretical Coverage

20.7 m² per liter ready to apply at 25 μ m dry film thickness 844 ft² per US gallon ready to apply at 1 mil dry film thickness



Dry Film Weight

30.9 g/m²/25 micron 0.006 lbs/ft²/1 mil



Volatile Organic Compounds Max 420 g/l Max 3.5 lb/gal



Gloss (60°)

Gloss can only be measured once the clear coat is applied to the material, using a conventional 60 degree gloss meter will not give consistent accurate readings



Color

Diamond Ice Mica BAC 51470

AkzoNobel Aerospace Coatings

Eclipse[®] ECL-G-857

Polyurethane Diamond Ice Mica Base





Flash-point

ECL-G-857 PC-233 12°C / 54°F 166°C / 330°F



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)

Safety Precautions

24 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.

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 MSDSs are available on request.

Issue date: June 2012 (supersedes November 2009) - FOR PROFESSIONAL USE ONLY

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 using 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 product. All 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 carefully. 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.

Brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel