

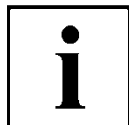
## Eclipse Gloss

### Technical Data Sheet

#### Product Group

#### Polyurethane Top Coat

#### Characteristics

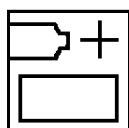


Product Information

Eclipse Gloss is a chemically cured, low VOC topcoat designed to provide premium gloss and distinctness of image (DOI). This coating has a balanced formulation to provide superior chemical and stain resistance, and flexibility.

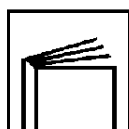
Eclipse topcoats provide a durable, long lasting, protective and decorative finish that exceed typical OEM requirements for exterior aircraft performance.

#### Components



Base	ECL-G-XXX
Curing Solution	Curing Solution PC-233
Thinner	Thinner TR-109
Thinner	Thinner TR-111
Thinner	Thinner TR-112
Thinner	Thinner TR-113
Thinner	Thinner TR-141

#### Specifications



Qualified Product List

Airbus Canada	A2MS 565-009
Avic Aviation	AMMS2502
Boeing Long Beach	DPM 6502
Boeing	BMS 10-125, TY II, GR D
Boeing	BMS 10-60, TYI&II CLB GRD
Boeing	BMS 10-72, TY IX
Bombardier Canadair	BAMS 565-002, GR B
Bombardier Canadair	BAMS 565-009, TY I GR B
Comac	CMS-CT-101, TY I
Comac	CMS-CT-101, TY III
Embraer	MEP 10-069
Goodrich Corporation	LGQP 6001
Irkut	741.14021-00-00-0038-0T040A
Israel Aerospace Industries	MS100029E, CL HS
Mitsubishi	MM1276, TY I
SAE International	AMS3095B
Sikorsky	SS 8526, TY I&TY II
Xian Aircraft Corp	XMS1622
deHavilland	DHMS C4.04, TY6 CLB GRB

Product specifications are constantly changing, to ensure the most accurate information regarding specifications, please check our online qualified product list (QPL) at [aerospace.akzonobel.com/products](https://aerospace.akzonobel.com/products).

# Eclipse Gloss

## Surface Conditions



Surface Preparation/  
Cleaning

Eclipse Gloss topcoat is compatible with 10P20-44, 10P20-44MNF, Aerodur 2111, Aerodur HS 2118, 10P8-11 and other AkzoNobel primers.

Clean aged primer or epoxy/polyurethane finishes and sand/abrade to a uniform matt finish using grade P320 sandpaper or an aluminum oxide nonwoven abrasive pad.

Clean and degrease the surface with an approved solvent prior to application of the pre-treatment or primer.

Remove dust and debris with clean tack rags or equivalent.

## Instruction for Use




Spray Application (Mix  
Ratio)

	Volume
ECL-G-XXX	2 parts
Curing Solution PC-233	1 part
Thinner*	1 part

\* Thinner options: Thinner TR-109, Thinner TR-111, Thinner TR-112, Thinner TR-113, Thinner TR-141

- Allow products to acclimatize to ambient conditions before use.
- Stir or shake the base component thoroughly to a homogeneous state prior to the addition of the curing solution.
- Add curing solution PC-233 and stir the catalyzed mixture thoroughly.
- Add the thinner and stir the catalyzed mixture again thoroughly prior to application.
- ECL-G-XXXX base component is used in conjunction with Eclipse Special Effects as a foundation color.




Induction Time

Not Applicable




Initial Spraying  
Viscosity (25°C/77°F)

30 – 50 seconds ISO Cup #4  
15 – 23 seconds Gardner Signature Zahn Cup #2  
21 – 31 seconds EZ Zahn Cup #2  
15 – 23 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.



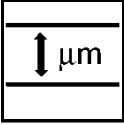
Pot life (25°C/77°F)

Gloss White	4 hours
Gloss Colors	3 hours




Note

Pot life will be reduced by varying degrees when using the alternative thinners to TR-109. See drying chart.



Dry Film Thickness  
(DFT)

51 – 76 µm  
2 – 3 mils



Note

Some colors may require increased film thickness to achieve acceptable hide.


# Eclipse Gloss

## Application Recommendations

	Conditions	Temperature: 15-35°C / 59-95°F Relative Humidity: 35 - 75%																														
	Note	Eclipse Gloss topcoat may be applied in conditions outside the limits shown above. Care must be exercised to ensure a satisfactory result. Please contact your local AkzoNobel Aerospace Coatings representative to determine the appropriate application techniques when environmental conditions fall outside of the recommended range.																														
	Equipment Recommendation	<table><thead><tr><th>Spray gun type</th><th>Product supply</th><th>Fluid Pressure</th><th>Nozzle orifice</th><th>Product flow</th><th>Dynamic air pressure at gun-inlet *</th></tr></thead><tbody><tr><td>Conventional</td><td>N/A</td><td>N/A</td><td>1.2-1.4 mm</td><td>N/A</td><td>3-5 bar / 43-73 psi</td></tr><tr><td>HVLP / Next Generation</td><td>N/A</td><td>N/A</td><td>1.2-1.4 mm</td><td>N/A</td><td>2-2.5 bar / 29-36 psi**</td></tr><tr><td>Air Atomizing (electrostatic)</td><td>N/A</td><td>N/A</td><td>1.2-1.5 mm</td><td>230-350 ml/min</td><td>4-5 bar / 58-73 psi</td></tr><tr><td>Pressure Atomizing (electrostatic)</td><td>N/A</td><td>75-90 bar / 1-1.3k psi, 25-35 bar / 0.4-0.5k psi</td><td>0.009 inch/60°, 0.013 inch/60°</td><td>260-300 ml/min</td><td>4-4.5 bar / 58-65 psi</td></tr></tbody></table> <p>*Measured with an open trigger. **General advice to meet the HVLP / next-generation spray gun requirements. Please validate with your local authorities.</p>	Spray gun type	Product supply	Fluid Pressure	Nozzle orifice	Product flow	Dynamic air pressure at gun-inlet *	Conventional	N/A	N/A	1.2-1.4 mm	N/A	3-5 bar / 43-73 psi	HVLP / Next Generation	N/A	N/A	1.2-1.4 mm	N/A	2-2.5 bar / 29-36 psi**	Air Atomizing (electrostatic)	N/A	N/A	1.2-1.5 mm	230-350 ml/min	4-5 bar / 58-73 psi	Pressure Atomizing (electrostatic)	N/A	75-90 bar / 1-1.3k psi, 25-35 bar / 0.4-0.5k psi	0.009 inch/60°, 0.013 inch/60°	260-300 ml/min	4-4.5 bar / 58-65 psi
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	Number of Coats	<p>Apply Eclipse Gloss topcoat in two to three full wet coat applications to a recommended dry film thickness of 50-75 µm (2-3 mils). Apply a single wet coat. Allow sufficient flash-off time between coats at ambient conditions in accordance with the table below. Apply a second wet coat. Repeat this if additional coats are needed.</p> <table><thead><tr><th>Thinner/Reducer</th><th>Recommended Flash-Off Time</th></tr></thead><tbody><tr><td>TR-109</td><td>45-120 minutes</td></tr><tr><td>TR-111</td><td>30-60 minutes</td></tr><tr><td>TR-112</td><td>20-40 minutes</td></tr><tr><td>TR-113</td><td>15-30 minutes</td></tr><tr><td>TR-141</td><td>45-120 minutes</td></tr></tbody></table> <p>When bright transparent colors (e.g. bright orange, yellow) are applied, it is advisable to first apply Eclipse foundation color in an off-white color (e.g. BAC 70846) before application of the final bright color. This is to reduce the number of coats necessary for industrial hiding.</p>	Thinner/Reducer	Recommended Flash-Off Time	TR-109	45-120 minutes	TR-111	30-60 minutes	TR-112	20-40 minutes	TR-113	15-30 minutes	TR-141	45-120 minutes																		
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	Note	Flash-off time refers to the elapsed time between the start of the first coat application and the start of the second coat application. Paint should have very little transfer when touched to indicate the paint is ready for application of the next coat.																														
	Cleaning of Equipment	Solvent Cleaning C28/15 (electrostatic equipment). Solvent Cleaning C28/15 or TR-19 for other spray equipment																														
	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 to identify the best equipment settings to be used in optimizing the performance and appearance of the coating.																														

# Eclipse Gloss

## Physical Properties

	Drying Times	(25°C / 77°F, 50% RH)	Dry to touch	3.25 hours	TR-109
				3.25 hours	TR-111
				1.75 hours	TR-112
				45 minutes	TR-113
				3.25 hours	TR-141
			Dry to tape	10 – 12 hours	TR-109
				7 – 8 hours	TR-111
				5 – 6 hours	TR-112
				2 – 3 hours	TR-113
				10 – 12 hours	TR-141
			(32°C / 90°F, 40% RH)		
			Dry to tape	8 – 9 hours	TR-109
				4 – 5 hours	TR-111
				2 – 3 hours	TR-112
				1 – 2 hours	TR-113
				7 – 9 hours	TR-141
			(48°C / 120°F, 10% RH)		
			Dry to tape	4 – 5 hours	TR-109
				3 – 4 hours	TR-111
				1 – 2 hours	TR-112
				<1 hours	TR-113
				4 – 6 hours	TR-141


At standard temperature and humidity conditions, TR-109 will provide the indicated dry to tape times with a wet edge time of 30-60 minutes. At standard conditions, TR-111 will provide a wet edge time of 20-40 minutes. TR-141 is formulated to optimize wet edge performance at elevated temperatures, 30°C-38°C / 85°F-100°F.

TR-112 is suggested for roller application and TR-113 is recommended for touch-up and markings only. Both are pre-adjusted to meet specific dry times. No additional accelerator should be added.


TR-109, TR-111, TR-112 and TR-113 are Boeing approved per BMS 10-72 and BMS 10-60

Eclipse Gloss topcoat may be recoated within 24 hours with no reactivation if TR-109 or TR-141 was used in the undercoat. Max recoat time with no reactivation is 12 hours if TR-111 was used in the undercoat. If the allotted drying time is exceeded, reactivate with P320 grade sandpaper or an aluminum oxide non-woven abrasive pad.

Dry times and recoat times will vary depending on combinations of temperature, humidity, and airflow.




Note

	Theoretical Coverage	22 m² per liter ready to apply at 25 µm dry film thickness.
		900 ft² per US gallon ready to apply at 1 mil dry film thickness.



Dry Film Weight





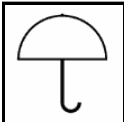
1.57 g/m²/µm  
0.0082 lbs/ft²/mil



Note

For white and off-white color scheme. Other colors available upon request.

## Eclipse Gloss

	Volatile Organic Compounds	Maximum 420 g/l. Maximum 3.5 lbs/gal
	Gloss (60°)	Minimum 90 GU
	Color	As required.
	Flash Point	ECL-G-XXX 25°C / 77°F Curing Solution PC-233 166°C / 330.8°F Thinner TR-109 36°C / 96.8°F Thinner TR-111 36°C / 96.8°F Thinner TR-112 34°C / 93.2°F Thinner TR-113 34°C / 93.2°F Thinner TR-141 34°C / 93.2°F
	Storage	Store the product dry and at a temperature between 5 and 38°C / 41 and 100°F per AkzoNobel Aerospace Coatings specification. Store in the original unopened containers. Storage temperature and shelf life may vary per OEM specification requirements. Refer to the container label for specific storage life information.
	Shelf life 5 - 38°C (41 - 100°F)	ECL-G-XXX 24 months Curing Solution PC-233 24 months Thinner TR-109 24 months Thinner TR-111 24 months Thinner TR-112 24 months Thinner TR-113 24 months Thinner TR-141 24 months

### 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.

Revision date: September 2025 (supersedes April 2025) - 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