



Product Group

Buffable high solids polyurethane topcoat

Characteristics



Product
Information

- A high solids polyurethane finish designed to provide premium gloss and distinctness of image (DOI).
- A balanced formulation to provide excellent buffing properties along with superior chemical and stain resistance and flexibility.
- When used with selected AkzoNobel primers, Alumigrip[®] HS topcoat provides a durable, long lasting, protective and decorative finish that exceeds typical GA requirements for exterior aircraft performance.

Components



Curing Solution,
Activator

Curing Solution: PC-242
Activator Options: AC-139 or AC-140

Specifications



Qualified Product
List

Cessna	CMFS037
Hawker Beech	BS22455
	BS25065
	BS25314
Sino Swearingen	PS84

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.

Alumigrip[®] HS topcoats are compatible with most AkzoNobel Aerospace Coatings primer options. Please consult the technical data sheet or process standard of the primer chosen for substrate preparation instructions.

Instruction for Use



Mixing Ratio
(volume)

1 part (1 gal)	Base: AHS-G-XXX
1 part (1 gal)	Curing Solution: PC-242
.125 parts (1 pint)	Activator: AC-139 or AC-140

An additional amount of up to 8 ounces (½ pint) of TR-115 or technical grade acetone per kit may be used as a thinner



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



Induction Time

15 minutes



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

35 – 50 seconds ISO Cup 4mm
18 – 22 seconds Signature Zahn Cup #2

The uses of Signature Zahn cups for viscosity are requirements of the referenced specifications, and the ISO cup measurement is provided only as a reference for field application. They are not provided as quality control values. 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.



Note

	AC-139	AC-140
White	4 hours	30 minutes
Colors	3 hours	30 minutes

Pot life will be reduced when using AC-140. Please see drying time chart.



Pot Life (25°C/77°F)

50 – 75 microns (µm)
2 – 3 mils



Dry Film Thickness (DFT)

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

Conventional Air
Atomizing air pressure: 45-65 psi
Pot pressure (if applicable): 5-20 psi
Tip size: 1.2 – 1.4 mm

HVLP
Input air: up to 45 psi.
Fluid/pot pressure: 5 to 20 psi.
Tip size: 1.2 – 1.4 mm.



Equipment Continued

Air assist airless electrostatic spray equipment

Fluid pressure: 850 - 1000 psi
Atomizing air pressure: 55 - 65 psi
Tip size: 0.33mm (.013 inch) or smaller, preferably 0.28mm (.011 inch)

High pressure air assist airless electrostatic spray equipment

Fluid pressure: 1800 - 2500 psi,
Atomizing air pressure: 55-65 psi, Tip size: 0.23 - 0.28 mm (009 - .011 inch)



Number of coats

Flash time 30-45 minutes (using AC-139)

Recoat window 30-120 minutes (using AC-139)

Apply the first coat with sufficient wet film thickness to form a continuous film. Do not "paint to hide" on the first coat. A smooth, even, wet coat is desirable. Make every effort to avoid "dry" spraying, as this will increase the potential for orange peel. Allow 30 minute flash-off time.

Apply the second coat. This coat should be applied wet ensuring complete uniform coverage. If a third coat is required, allow 30-45 minutes between the second and third coats.



Cleaning of Equipment

Use TR-15 for clean up of electrostatic equipment and/or TR-19 for other spray equipment.

Physical Properties



Drying Times according to AITM 2-0011 (25 +/- 2°C / 77 +/- 2°F, 55 +/- 5% RH)

Dry to tape	AC 139	14-16 hrs
Full cure	AC-140* 7 days air dry	1-2 hrs

- At standard temp and humidity conditions, AC-139 will provide the indicated dry to tape time with a wet edge time of 30-60 minutes.
- The pot life and wet edge time will be reduced with the use of AC-140.
- Activator options may be blended to achieve the desired combination of dry time, buffing time, pot life and wet edge characteristics.

*** AC-140 is recommended for touch-up areas and speed lines only and is pre-adjusted to meet the indicated dry time. No additional accelerator should be added.**



Theoretical Coverage

20 m² per liter ready to apply at 25.4 μm dry film thickness
814 ft² per US gallon ready to apply at 1 mil dry film thickness

Typical for off-white, varies slightly with color



Dry Film Weight

38.41 g/m² at 25.4 microns
.0079 lbs/ft² at 1 mil

Typical for off-white, varies slightly with color



Volatile Organic Compounds

Max 420 g/l
Max. 3.5 lb/gal



Gloss (60°)

90 GU minimum



Color

As required



Flash-point

AHS-G-XXXX	12°C / 54°F
PC-242	35°C / 95°F
AC-139	36°C / 96°F
AC-140	36°C / 96°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)

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.



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 MSDSs 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 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.

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