

FRS40 Topcoat

Technical Data Sheet

Product Group

Characteristics



Product Information

Components



Specifications



Qualified Product List

Surface Conditions



Surface Preparation/
Cleaning

Cabin Coating

Three-component semi gloss and matt solvent-borne polyurethane topcoat for aircraft interiors. FRS40 is recommended for use with FRS30 or FR4-45 surfacers. Technical data sheets for FRS40 Metallic and FRS40 Flex shades are available on our website.

Base	FRS40 Base
Hardener	FRS Hardener
Thinner	FRSL Thinner

Airbus	ABS 5650B
Airbus	AIMS 04-08-002
Airbus	CML 16-047A
Airbus	CML-04-JMD9
C&D ZODIAC	CDM240-00
C&D ZODIAC	CDM240-01
CollinsAerospace	SPG-MPS-163 (BPS-0002Y)
F.LIST	LMS QM000094
FACC	FMS 5520 class 1
Pilatus	PMS0600-52-02
SAFRAN CABIN BELLINGHAM	HMS-D1-004

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

Can be applied on phenolic and plastic composites and on aluminium.
For surfaces that require surface preparation, the use of FRS30 or FR4-45 fillers are recommended.

Application on a composite substrate (new or reworked):
FRS30/FR4-45 is used as a primer/surfacer (see product data sheet for surface preparation).
FRS30/FR4-45 should be sanded with a P240 to P320 grade abrasive paper (dry or wet) and cleaned with isopropyl alcohol.

Application on a plastic substrate (new or reworked):
Except where there are surface defects, FRS40 can be applied directly onto plastics, except polycarbonates. The substrate should be sanded with P240 to P400 grade paper.
Then it should be blown from the dust and cleaned with isopropyl alcohol.

Application on aluminium:
FRS40 should be applied on a system composed of:
- Surface treatment (OAC type)
- Epoxy corrosion resistant primer (F69 type)
The primer should be dried for minimum 1 hour at 60°C (140°F) before applying the FRS40.

All recommendation mentioned above are given for information.

FRS40 Topcoat

Instruction for Use



Spray Application (Mix Ratio)

Weight

FRS40 Base	100 parts
FRS Hardener	10 parts
FRSL Thinner	10 to 20 parts

Ideally, the unmixed products should be stored between 18°C and 25°C (64°F and 77°F) for 24 hours before use. It is recommended to mix the base with the gyroscopic mixer before use.

Mixing by weight is recommended.
- Mix the base and hardener until the mixture is homogeneous.
- Then add thinner and mix.

Note : weight mixing ratio is the standard way of using cabin product to ensure consistency in color. In case volume ratio is needed for particular applications, please contact your Akzonobel representative with the material number of your product to obtain the correct mixing ratio in volume.

Note: it is recommended to sieve the mixing using a 150-190 µm (6-8 mils) filter.



Induction Time

Not Applicable.



Initial Spraying Viscosity
(20°C/68°F)

Dilution rate by weight	CA 4	ISO 6
10-20%	35s ± 5s	22s ± 5s



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.

Viscosities mentioned above are corresponding to the recommended range of viscosity to ensure compliant application. The range of dilution must be used to adjust viscosity to reach the recommended one. ISO 6 cup is the reference cup. The others are given for information purposes.



Pot life (20°C/68°F)

6 hours



Dry Film Thickness (DFT)

30 – 60 µm
1.2 – 2.4 mils



Wet Film Thickness (WFT)

60 – 120 µm
2.4 – 4.7 mils

Application Recommendations



Conditions

Temperature:	15 – 35 °C 59 – 95 °F
Relative Humidity:	20 – 80 %



Conditions

Topcoat FRS40 may be applied in conditions outside of the limits shown above. However, it is recommended to be careful to ensure a satisfactory result. Please contact your local AkzoNobel Aerospace Coatings representative to determine the proper application techniques when environmental conditions are outside of the recommended range.

FRS40 Topcoat

	Equipment Recommendation	Gravity compressed air gun - Nozzle 1.8 mm to 2.2 mm
	Number of Coats	For smooth surface: Apply 1 or 2 crossed coats. For textured surface: Apply a regular coat of paint diluted at around 25 %. Once the coat appears matt/semi-gloss (after approx. 30 minutes depending on the drying environment), the texture can be applied as follows : - Fine texture: decrease the air pressure to 1.5 to 2 bars (22 to 29 psi) and apply at 50 cm from the surface. - Coarse texture: decrease the air pressure to 1.0 to 1.5 bar (15 to 22 psi) and apply at 20 cm from the surface.
	Cleaning of Equipment	Clean the equipment with a suitable solvent, such as FRSL from AkzoNobel.
	Note	Spray with dry, oil-free air. The pressures indicated for a textured application are provided for guidance and will need to be adjusted depending in the application conditions (e.g.: type of gun, desired aspect...).

Physical Properties

	Drying Times	<table><tr><th></th><th>23°C/73°F</th><th>40°C/104°F</th><th>60°C/140°F</th></tr><tr><td>Dust Free</td><td>15 minutes</td><td>NA *</td><td>NA *</td></tr><tr><td>Dry to Handle</td><td>8 hours</td><td>4 hours</td><td>1 hour</td></tr><tr><td>Recoatable</td><td>1 hour to 24 hours</td><td>30 minutes to 8 hours</td><td>15 minutes to 6 hours</td></tr><tr><td>Full Cure</td><td>7 days</td><td>3 days</td><td>12 hours</td></tr></table>				23°C/73°F	40°C/104°F	60°C/140°F	Dust Free	15 minutes	NA *	NA *	Dry to Handle	8 hours	4 hours	1 hour	Recoatable	1 hour to 24 hours	30 minutes to 8 hours	15 minutes to 6 hours	Full Cure	7 days	3 days	12 hours
	23°C/73°F	40°C/104°F	60°C/140°F																					
Dust Free	15 minutes	NA *	NA *																					
Dry to Handle	8 hours	4 hours	1 hour																					
Recoatable	1 hour to 24 hours	30 minutes to 8 hours	15 minutes to 6 hours																					
Full Cure	7 days	3 days	12 hours																					
	Note	Drying times have been determined using tests pieces of a thickness < 2mm for 45µm (1.8mils) of dry film. *N.A. : Not applicable.																						
	Theoretical Coverage	7 m²/kg (390 ft²/gal) for 50 µm (2 mils) dry (base and hardener undiluted).																						
	Dry Film Weight	1.9 (g/m²/µm)																						
	Volatile Organic Compounds	450-500 g/L (3.76-4.17 lbs./gal) for a 10-20% dilution(ASTM D3960 and ISO 11890-1)).																						
	Gloss	Matt or semi-gloss.																						
	Flash Point	FRS40 Base	Between 23 °C (73 °F) and 60 °C (140 °F)																					
		FRS Hardener	Between 23 °C (73 °F) and 60 °C (140 °F)																					

FRS40 Topcoat

FRSL Thinner
Between 23 °C (73 °F) and 60 °C (140 °F)



Storage

Store the product dry and at a temperature between 5 and 35°C / 41 and 95°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 - 35°C (41 - 95°F)

FRS40 Base	36 months
FRS Hardener	24 months
FRSL Thinner	48 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: April 2026 (supersedes January 2026) - 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