

20P1-21

Technical Data Sheet

Product Group

Fuel Tank Coating

Characteristics



Product Information

420 g/l polyurethane coating
- Intended for the protection of aircraft integral fuel tanks against corrosion from fuel contaminants.
- Lead-free and EE-acetate free.

Components



Base	20P1-21
Curing Solution	Curing Solution PC-235
Thinner	Thinner TR-117

Specifications



Qualified Product List

Boeing Long Beach	DMS 1850, TY I, COMP B
Bombardier	BAMS 565-010, Gr B
GulfstreamAerospace	GAMS3102
SAEInternational	AMS-C-27725, TY 1, GR 1
SAEInternational	AMS-C-27725, TY 2, GR 1

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.

Surface Conditions



Surface Preparation/
Cleaning

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

Instruction for Use



Spray Application (Mix Ratio)

	Volume
20P1-21	3 parts
Curing Solution PC-235	1 part
Thinner TR-117	*0 to 1 part
* Thinner is optional based on the specification	
For DMS 1850 :	
20P1-21 base	3 parts
PC-235 curing solution	1 part
TR-117 thinner	0.5 parts

Stir or shake until all pigment is uniformly dispersed before adding a curing solution.
- Stir the catalyzed mixture thoroughly.
- Depending on the equipment, up to 1 part by volume of TR-117 may be used to enhance the appearance of the finish. VOC is affected by use of TR-117.

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	Induction Time	15 minutes.
	Initial Spraying Viscosity (25°C/77°F)	32 – 44 seconds 4 mm ISO Cup 19 – 24 seconds #2 Signature Zahn Cup 10 – 25 seconds # 4 Ford Cup 13 – 23 seconds # 4 Ford Cup (AMS) 15 – 25 seconds # 4 Ford Cup (BAMS) 15 – 45 seconds # 4 Ford Cup (DHMS) 13 – 18 seconds # 4 Ford Cup for DMS 1850 The use of Ford and 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.
	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
	Dry Film Thickness (DFT)	20 – 30 µm 0.8 – 1.2 mils

Application Recommendations



Conditions

Temperature:

15 – 35 °C
59 – 95 °F

Relative Humidity:

35 – 75 %



Note

20P1-21 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

Spray gun type	Product supply	Fluid Pressure	Nozzle orifice	Product flow	Dynamic air pressure at gun-inlet *
Conventional	NA	1.4 mm (.055 inch)	NA	NA	NA
HVLP / Next Generation	NA	1.4 mm (.055 inch)	NA	NA	NA



Number of Coats

Spray apply one or two uniform wet coats to recommended dry film thickness.



Cleaning of Equipment

Use MEK or similar solvent.

Physical Properties

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	Drying Times	25°C/77°F, 55% RH	
	Tack Free	3 hours maximum	
	Dry Hard	12 hours maximum	
	Full Cure	14 days	
	- The ambient cure schedule is affected by relative humidity. A 14-day room temperature cure requires a minimum of 50% RH. - The following accelerated cure schedule generally results in maximum chemical resistance properties for this coating: flash-off 2 hrs @ ambient conditions, followed by 4 hours at 70°C/158°F ± 2°C.		
	Note		
	Theoretical Coverage	19.4 m² per liter ready to apply at 25.4 µm dry film thickness. 791 ft² per US gallon ready to apply at 1 mil dry film thickness.	
	Dry Film Weight	44.08 g/m² at 25.4 microns. .0090 lbs/ft² at 1.0 mil.	
	Volatile Organic Compounds	Max. 420 g/l Max. 3.5 lbs/gal	
	Gloss	25 GU	
	Color	Yellow	
	Flash Point	20P1-21	8°C / 46°F
		Curing Solution PC-235	7°C / 45°F
		Thinner TR-117	-13°C / 9°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 may vary per OEM specification requirements. Refer to container label for specific storage life information.	
	Shelf life 5 - 38°C (41 - 100°F)	20P1-21	24 months
		Curing Solution PC-235	24 months
		Thinner TR-117	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.
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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

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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