23T3 Series

VOC Compliant Abrasion Resistant Polyurethane Coating

Technical Data Sheet

Product Group

Abrasion resistant coating

Characteristics

Product Information

- Two component PTFE-filled, polyurethane anti-chafe air curing coating.
- Inherently light stable with excellent abrasion resistance and surface lubricity.
- For use on aircraft control surfaces.
- Resistant to hydraulic fluids (Skydrol®, Aerosafe, HyJet), aircraft fuel, engine oil, solvents, water and cleaning compounds.

Components

Curing Solution
Thinner

Curing solution PC-216
Thinner: 66C28, 66C20, TR-19, TR-20 or TR-115 where VOC regulations allow.

Specifications

Qualified Product List

Boeing (BAC 700 and BAC 707 only)	BMS 10-86, Type I, Grade D
Boeing Mesa	HMS 15-1218
Bombardier	BAMS 565-005, Type II
	BAMS 565-005, Type III
Bombardier/deHavilland	DHMS C4.08, Amend. 2
Embraer	MEP 10-071
Lockheed Martin	FMS 3120, Type I
	5PTMRL40, Type I
	LMA –MR008, Type I
Northrop Grumman	GC130RJ
Pratt & Whitney	PWA 36514
Shorts Brothers	SMS 93, Ty I

For most recent up-date or missing specifications please check the qualified product list (QPL) on **www.akzonobel.com/aerospace**

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Surface Conditions

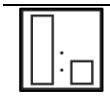
Cleaning

Surface pretreatment is an essential part of the painting process.

- Primed surface should be coated within 2-48 hours.

Note: If the primed surface dries longer than 48 hours, it should be lightly sanded with #400 grit or equivalent sandpaper followed by a solvent wash using a clean cotton cloth dampened with MEK before topcoat.

Instruction for Use



Mixing Ratio (volume)

3 parts	Base 23T3-XXX
1 part	Curing Solution PC-216

Where VOC regulations allow and depending on temperature and humidity conditions, additional thinning may be made with 66C28, 66C20, TR-19, TR-20 or TR-115. Up to 1 part thinner may be used.

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

Induction Time

None

Initial Spraying Viscosity (25ºC/77ºF)

16 – 24 seconds ISO Cup #6
15 – 27 seconds Signature Zahn Cup #3

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.

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.

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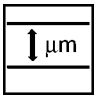
 Pot life (25ºC/77ºF)	After 1 hour: 72 seconds ISO Cup #6 After 2 hours: Sprayable.
 Dry Film Thickness (DFT)	125 – 250 microns (µm) 5 – 10 mils

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 1.8 mm nozzle orifice HVLP 1.4 mm nozzle orifice Air Assisted, Electrostatic .33 mm nozzle orifice
 Note	If roller application is desired use foam roller (Foam Pro Fine Finishing Roller Model #165 or equivalent for use with oil and clear solvent based products). Rollers will degrade and should be changed out every 30 minutes. For additional information please see the 23T3 roller application process document.

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Number of Coats	Apply wet cross coats, allowing 15 minutes to flash off between coats, to achieve 2-3 mils (50-75 microns) dry per coat.
Cleaning of Equipment	MEK, TR-19, or C28/15

Physical Properties

Drying Times (25 +/- 2ºC / 77 +/- 2ºF, 55 +/- 5% RH)	Set to touch	1.5 – 2 hours
	Tack free	3.25 – 3.5 hours
	Dry to touch	5.25 hours
Note	An accelerated cure schedule may be used. Once the required film thickness has been achieved, flash dry the applied coating a minimum of one hour at 75°F (24°C), 50%RH. Cure for two hours at 150°F (66°C), with good air movement.	
Theoretical Coverage	20 m^2 per liter ready to apply at 25.4 µm dry film thickness 800 ft^2 per US gallon ready to apply at 1 mil dry film thickness	
Dry Film Weight	44 g/m^2 at 25.4 microns 0.0090 lbs/ft^2 at 1 mil Varies slightly with color	
Volatile Organic Compounds	Max 420 g/l Max 3.5 lb/gal maximum (without thinner), per ASTM D3960.	
Gloss (60º)	24 maximum	

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Color	As required

Flash-point	23T3-XXX	27°C / 80°F
	PC-216	28°C / 78°F
	66C28	13°C / 55°F
	66C20	-4°C / 25°F
	TR-19	-4°C / 25°F
	TR-20	7°C / 45°F
	TR-115	-17°C / 1°F

Storage	Store the product dry and at a temperature between 5 and 38ºC / 40 and 100ºF 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)	12 months per AkzoNobel Aerospace Coatings commercial specification for 23T3-XXX and PC-216. 24 months for 66C28, 66C20, TR-19, TR-20, and TR-115. 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 MSDS's are available on request.

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