23T3 Series
Technical Data Sheet

Product Group

VOC compliant abrasion resistant coating.

Characteristics

Product Information

A two-component, PTFE-filled, anti-chafe, air curing, low VOC compliant topcoat. This coating is inherently light stable with excellent abrasion resistance and surface lubricity.

23T3 Series topcoat is resistant to phosphate ester hydraulic fluid, aircraft fuel, engine oil, solvents, water and cleaning compounds and is used on aircraft control surfaces.

Components

Base material	23T3-XXX
Curing Solution	PC-216
Thinner	66C28, 66C20, TR-19, TR-20 or TR-115

Specifications

Qualified Product List

Airbus Canada	A2MS 565-005, TYII A2MS 565-005, TYIII
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
Ilyushin	ТИ756.18.618

AkzoNobel Aerospace Coatings
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23T3 Series
Polyurethane Topcoat

Only 23T3-10 and 23T3-105 are qualified for BMS 10-86.

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.

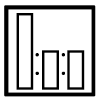
Surface Conditions

Observe the overcoat window of the primer.

Cleaning

Sand pre-existing topcoats with 220 grit or equivalent sandpaper to a dull mat finish, and solvent clean prior to applying 23T3.

Instruction for Use



Mixing Ratio (volume)

23T3-XXX	3 parts
PC-216	1 part
Thinner	*1 part

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

*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.

Induction Time

None.

Initial Spraying Viscosity (25ºC/77ºF)

16-24 seconds ISO Cup #6
15-25 seconds Signature Zahn Cup #3

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

Application Recommendations

Conditions	Temperature:	15-35°C 59-95°F
	Relative Humidity:	35-75%
Note	23T3 Series 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.	

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Equipment

Spray gun type	Nozzle orifice	Product flow	Dynamic air pressure at gun-inlet*
Conventional	Gravity Feed: 1.4mm-.6 mm Pressure Feed: N/A	N/A	Use enough Air Pressure. </=100psi or (7 bar)
HVLP/ next generation	Gravity Feed: 1.4mm-.6 mm Pressure Feed: N/A	N/A	Maximize and ensure uniform fan pattern, not to exceed regulatory guideline for air pressure at the cap.

Note

If roller application is desired, use a fine finishing for solvent-based products. Rollers will degrade and should be changed every 30 minutes.

Number of Coats

Apply full wet coats, allowing 15 minutes to flash off between coats, to achieve 50-75 µm (2-3 mils) dry per coat.

Cleaning of Equipment

MEK, TR-19, or C28/15.

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.

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Physical Properties

Drying Times (25ºC / 77ºF, 55% RH)	Dust free	1.5-2 hrs
	Tack free	3.25-3.5 hrs
	Dry through	5.25 hrs
	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	4.24 m^2 per liter ready to apply (without thinner) at 125 µm dry film thickness. 173 ft^2 per US gallon ready to apply (without thinner) at 5 mils dry film thickness.	
Dry Film Weight	For 23T3-105: 1.31 g/m²/µm 0.00684 lbs/ft²/mil	
Note	Varies slightly with color.	
Volatile Organic Compounds	Without thinner: Max. 420 g/l Max. 3.5 lbs/gal	
Gloss (60º)	Maximum 65	
Color	As required.	

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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 / 41 and 100ºF per AkzoNobel Aerospace Coatings specification. Store in the original unopened containers. Storage temperature and shelf life may vary per OEM specification requirements. Refer to container label for specific storage life information.

Shelf life 5 - 38°C (41 - 100°F)		
	23T3-XXX	12 months
	PC-216	12 months
	66C28	24 months
	66C20	24 months
	TR-19	24 months
	TR-20	24 months
	TR-115	24 month

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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