

23T3 Series VOC Compliant Abrasion Resistant Polyurethane Coating

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	BMS 10-86, Type I, Grade D (BAC 700 and BAC 707 only)
Boeing Mesa	HMS 15-1218
Bombardier/Canadair	BAMS 565-005, Type II
DeHavilland/Bombardier	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

The complete AkzoNobel Aerospace Coatings qualified product list (QPL) can be found at: www.akzonobel.com/aerospace

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Surface Conditions



Cleaning

- Primed surface should be coated within 2-48 hours.
- 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 |
| 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 base material thoroughly before adding curing solution, then stir again thoroughly and the material is ready to apply by brush or spray.



Induction Time

None



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

- | | |
|-----------------|-----------------------|
| 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.



Pot Life
(25°C/77°F)

- | | |
|----------------|-----------------------|
| After 1 hour: | 72 seconds ISO Cup #6 |
| After 2 hours: | Sprayable |



Dry Film
Thickness
(DFT)

- | |
|------------------------|
| 125 – 250 microns (µm) |
| 5 – 10 mils |

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Application Recommendations



Conditions

Temperature: 15 – 35°C
59 – 95°F
Relative Humidity: 35 – 75%



Equipment

Air 1.8 mm nozzle orifice
HVLP 1.4 mm nozzle orifice
Air Assisted, Electrostatic .33 mm nozzle orifice



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



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.

Physical Properties



Drying Times
(25°C/77°F)

Set to touch 1.5 – 2 hours
Tack free 3.25 – 3.5 hours
Dry to touch 5.25 hours

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

Approximately 20 m² per liter ready to apply at 25.4 μm dry film thickness
Approximately 800 ft² per US gallon ready to apply at 1 mil dry film thickness

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Dry Film Weight

Approximately 44 g/m² at 25.4 microns

Approximately .0090 lbs/ft² at 1 mil

Varies slightly with color



Volatile Organic Compounds

420 g/l (3.5 lb/gal) maximum (without thinner), per ASTM D3960.



Gloss (60°)

24 maximum



Color

As required



Flash-point

23T3-series	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 38°C / 40 and 100°F per ANAC 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 ANAC commercial specification
Shelf life may vary due to OEM specification requirements.
Refer to container label for specific shelf life information.

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Safety Precautions

Avoid eye and skin contact and excessive vapor inhalation. Treat as you would strong solvents. 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.

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.

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