

422X Series

High Solids Topcoat

Technical Data Sheet

Product Group

Epoxy Topcoat

Characteristics



Product
Information

- A two-component, chemically cured epoxy topcoat designed to provide chemical resistance coupled with sufficient flexibility to minimize chipping and flaking. This epoxy topcoat can be used with various primers. Normally military specification primers MIL-P-85582, MIL-PRF-23377 or MIL-P-53022 are recommended.

Components



Curing Solution

Gloss Curing Solution: 0200T129
Semi-gloss and Flat Curing Solution: 0200T126

Specifications



Qualified
Product List

Air France SMI 70 132-1
Military US MIL-PRF-22750

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

Surface Conditions



Cleaning

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

Instruction for Use



Mixing Ratio
(volume)

3 parts
1 part

Gloss

Base 422X Series
Curing Solution 0200T129

Semi-gloss and Flat

3 parts
1 part

Base 422X Series
Curing Solution 0200T126

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



Induction Time

30 minutes



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

50 seconds maximum (#4 Ford) admixed
75 seconds maximum (#4 Ford) at pot life

The uses of Ford Cups for viscosity are requirements of the referenced specifications, and provided only as a reference for field application. They are not provided as quality control values. Actual values will vary when tested outside of standard conditions (25°C/77°F)



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)

1.8 – 2.2 mils
46 – 56 microns

Application Recommendations



Conditions

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

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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

Standard suction, pressure, HVLP or airless spray



Number of Coats

Spray a uniform wet coat. Flash 10-15 minutes, then apply a second wet coat to recommended dry film thickness.



Cleaning of Equipment

Use TR-19 for cleanup. This balanced thinner will minimize the possibility of residue remaining on the equipment.

Physical Properties



Drying Times
(25 +/- 2°C / 77
+/- 2°F, 55 +/-
5% RH)

Dry to touch	3 hours
Dry to tape	8 hours
Full cure	14 days
<u>Accelerated Cure</u>	
Dry to tape / handle	2 hour flash off at ambient, then 20 – 30 minutes at 140°F (60°C)
Full Cure	24 hour flash off at ambient, then 24 hours @ 150°F (65.5°C)

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Note

CAUTION: The accelerated cure for dry to tape / handle may cause a slight variation to color and/or gloss in some topcoats. Light colors, e.g., white and off white, in the semi gloss range could be affected.

NOTE: The cure required will vary due to the efficiency of the oven being used (evacuating the solvent heavy air) and the amount of air movement in the oven. The customer should run tests to verify the required cure schedule.



Theoretical
Coverage

20.3 – 22.1 m² per liter ready to apply at 25 µm dry film thickness
825 – 900 ft² per US gallon ready to apply at 1 mil dry film thickness



Dry Film Weight

Gloss
39.3 ± 3.0 g/m²/25 µm micron
0.0080 ± 0.0008 lbs/ft²/mil
Semi-gloss and Flat
46.3 ± 3.0 g/m²/25 µm micron
0.0094 ± 0.0008 lbs/ft²/mil



Volatile Organic
Compounds

Max 340 g/l
Max. 2.8 lb/gal



Gloss (60°)

Gloss 90+
422XT1XXXXX* / 0200T129
Semi-gloss 15 to 30
422XT2XXXXX* / 0200T126
Camouflage 5 maximum (9 maximum 85°)
422XT3XXXXX* / 0200T126

*Last 5 digits refer to 595B Federal Standard Color

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Color

As required:

595-16492
595-17178
595-36231
595-37038
595-17925



Flash-point

422X Series	-4°C / 25°F
0200T126	27°C / 80°F
0200T129	36°C / 97°F



Storage

Store the product dry and at a temperature between 5 and 38°C / 40 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
(40 - 100°F)

24 months per AkzoNobel Aerospace Coatings commercial specification. 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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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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