422X Series

Technical Data Sheet

Product Group

Epoxy Top Coat

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

Base	422X Series
Curing Solution	Curing Solution 0200T126
Curing Solution	Curing Solution 0200T129
Curing Solution	Curing Solution 0200T126C

Specifications

Qualified Product List

Air France	SMI 70 043
US Military	MIL-PRF-22750,TYII CLH GRA

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.

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Instruction for Use

Spray Application (Mix Ratio)

	Volume
422X Series	3 parts
Curing Solution 0200T126	1 part
Curing Solution 0200T129	1 part
Curing Solution 0200T126C	1 part

Gloss Curing Solution: 0200T129
Semi-gloss and Flat Curing Solution: 0200T126 & 0200T126C

	Gloss
3 parts	Base 422X Series
1 part	Curing Solution 0200T129

	Semi-gloss and Flat
3 parts	Base 422X Series
1 part	Curing Solution 0200T126 / 0200T126C

- Allow products to acclimatize to room temperature before use.
- Stir or shake the base component until all pigment is uniformly dispersed before adding the curing solution.
- Add the curing solution and stir the catalyzed mixture thoroughly.

With regards to the curing solution, C version means that it is compliant to the MIL spec requirement for HAPS content. The non C version meets the performance requirements for the MIL spec.

Induction Time

30 minutes.

Initial Spraying Viscosity ()

(25ºC/77ºF)

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 (25ºC/77ºF).

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 (25ºC/77ºF)

4 hours

Dry Film Thickness (DFT)

46 – 56 µm
1.8 – 2.2 mils

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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 airflow 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
the appearance of the coating.

Equipment Recommendation

Standard suction, pressure, HVLP or airless spray.

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°C/77°F, 55% RH
Dry to Touch	3 hours
Dry to Tape	8 hours
Full Cure	14 days

Accelerated Cure:
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).

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.

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 um
0.0080 ± 0.0008 lbs/ft²/mil

Semi-Gloss and Flat
46.3 ± 3.0 g/m²/25 um
0.0094 ± 0.0008 lbs/ft²/mil

Volatile Organic Compounds

Max 340 g/l
Max. 2.8 lbs/gal

Color

As required:
595-16492
595-17178
595-36231
595-37038
595-17925

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 Flash Point	422X Series	-4ºC / 25ºF
	Curing Solution 0200T126	27ºC / 80ºF
	Curing Solution 0200T129	36ºC / 97ºF
	Curing Solution 0200T126C	29°C / 84°F
Shelf life	Curing Solution 0200T126	
Shelf life 5 - 38°C (41 - 100°F)	422X Series	24 months
	Curing Solution 0200T129	24 months
	Curing Solution 0200T126C	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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