

422X Series

Technical Data Sheet

Product Group

Epoxy Top Coat

Characteristics

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.



Product Information

Components

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



Specifications

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



Qualified Product List

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



Surface Preparation/
Cleaning

422X Series

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 (s)

(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).



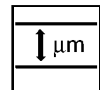
Note

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)

46 – 56 µm
1.8 – 2.2 mils

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Application Recommendations

| | | |
|--|--------------------------|---|
| | Conditions | Temperature: 15 – 35 °C 59 – 95 °F |
| | 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 m ² per liter ready to apply at 25 µm dry film thickness. 825 – 900 ft ² per US gallon ready to apply at 1 mil dry film thickness. | |
| | Dry Film Weight | Gloss 39.3 ± 3.0 g/m ² /25 µm 0.0080 ± 0.0008 lbs/ft ² /mil Semi-Gloss and Flat 46.3 ± 3.0 g/m ² /25 µm 0.0094 ± 0.0008 lbs/ft ² /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 | -4°C / 25°F |
| Curing Solution 0200T126 | 27°C / 80°F |
| Curing Solution 0200T129 | 36°C / 97°F |
| 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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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. Brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel