

#### **Technical Data Sheet**

#### **Product Group**

# Characteristics

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Product Information

#### **Epoxy Top Coat**

Three-component water-reducible glossy epoxy topcoat, with high chemical resistance. This product is designed for the protection of metallic structures on aircraft. F70-A topcoat has to be used in combination with AkzoNobel primer P60-A.

## Components



Base Base F70-A
Hardener Hardener F70-A
Thinner Demineralized Water

# **Specifications**



Qualified Product List

Airbus	ABP4-2130
Airbus	AIMS 04-04-003
Airbus	AIMS 04-04-040
Airbus	AIMS 04-04-041
Airbus	AIMS 04-04-064
Airbus	ASNA 5148
Airbus	PQ10050-240-01
Dassault	DGQT 1.7.0.0120

Product specifications change constantly, 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 Top coat F70-A should be applied on AkzoNobel P60-A primer. See recoating time recommended on the P60-A primer technical data sheet. All recommendations mentioned are given for information.

## **Instruction for Use**



Spray Application (Mix Ratio)

	Volume	Weight
Base F70-A	2 parts	100 parts
Hardener F70-A	1 part	42 parts
Demineralized Water	3 - 4 parts	110 - 150 parts

# MIXING PROCEDURE

Ideally, the unmixed products should be stored between 18°C (64°F) and 25°C (77°F) for 24 hours before use.

- The F70-A base should be stirred for 10 minutes in a pneumatic or oscillating mixer before use.
- Mix the base and the hardener until the mixture is homogenous before adding demineralized water in two stages.
- The mixture must be made at a temperature between 15°C (59°F) and 35°C (95°F).
- Sieve the paint through a 80-150  $\mu m$  (3.1-6.0 mils) filter. Never add additional water once the paint mixture has been made.



Induction Time

Not Applicable.

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**Initial Spraying** Viscosity (20°C/68°F) Spraying viscosity at 20°C / 68°F

Dilution rate in volume CA 4 ISO 4 Zahn 2 4 V  $20 \pm 3s$  $33 \pm 4s$  $22 \pm 3s$ 

Viscosities mentioned above correspond to the recommended range of viscosity to ensure compliant application.

The range of dilution must be used to adjust viscosity to reach the recommended one.

Water based paints show a thixotropic behavior. This implies that efflux time can vary according to different parameters such as: type of mixing, mixing quantity, dilution, temperature, time between mixing and viscosity measurement.

ISO 4 cup is the reference cup. The others are given for information purposes.



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 (20°C/68°F)

8 hours (dilution 4V).



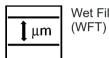
Note

The pot life depends on the dilution ratio. The paint viscosity may vary depending on the temperature and increase over the pot life. The water used to dilute the paint should be demineralized. Depending on the material used and the application temperature, the dilution may vary between 3 V and 4 V of demineralized water. A 3 V dilution of demineralized water is recommended for the white tints application.



Dry Film Thickness (DFT)

 $20 - 30 \mu m$ 0.8 - 1.2 mils



Wet Film Thickness

 $55 - 85 \mu m$ 2.2 - 3.3 mils



Brush Application (Mix

	Volume	Weight
Base F70-A	2 parts	100 parts
Hardener F70-A	1 part	42 parts
Demineralized Water	0 or from 1 part to 1.5 parts	0 or from 35 to 50 parts

## TOUCH-UP KIT (TUK) MIXING PROCEDURE

Remove the safety ring and press down on the cap to release the F70-A hardener. Shake the container for approximately 1 minute. Remove the cap to be able to apply the F70-A topcoat with a suitable brush. If the material is not homogeneous after 1min shaking, please use a stick for further mixing (around 1 min) until the material is homogeneous.

Do not hermetically close TUK after mixing base and hardener.



Note

In case of dilution, wait 3 minutes before adding demineralized water.



Pot life (23°C/73°F)

2 hours undiluted and from 1 volume to 1.5 volume



Note

Spray with dry, oil-free air.



Dry Film Thickness (DFT)

 $20 - 30 \mu m$ 0.8 - 1.2 mils

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# Application Recommendations



Conditions

Temperature: 15 - 35 °C 59 - 95 °F

Relative Humidity: 20 – 85 %



Note

TOPCOAT F70-A may be applied in conditions outside the limits shown above. However, it is recommended to be careful to ensure a satisfactory result. Please contact your local AkzoNobel Aerospace Coatings representative to determine the appropriate application techniques when environmental conditions are outside of the recommended range.



Equipment Recommendation

Gravity compressed air gun - Nozzle 0,8 mm to 1,8 mm



Number of Coats

Apply several coats to achieve 20  $\mu$ m to 30  $\mu$ m (0.8 to 1.2 mils) dry thickness. The number of coats depends on the size and the shape of the part to which it is being applied. The recommended dynamic air pressure is 1.5 bar to 4 bar (22 to 58 psi).



Note

In the event of a defect, contact your Quality Department.

In case of too low thickness:

Apply a thin coat of F70-A to achieve the desired thickness. If the above recommended recoating time is exceeded, reactivate with an abrasive pad.

In case of too thick coats:

Contact you Quality Department.

If there are micro-bubbles, runs, fish-eyes or numerous inclusions:

Reactivate the surface using an abrasive paper (grade 220 to 320), remove the dust then clean the surface using an approved cleaning product. Apply a thin coat of F70-A to achieve the required thickness.

In case of significant defects:

Remove the F70-A primer with an approved chemical paint stripper or make a selective stripping to the P60-A primer. A surface treatment and the P60-A primer application should be done once again in case the substrate is exposed.



Cleaning of Equipment

Clean the equipment with a suitable cleaning solvent such as Mapaero D760.

# **Physical Properties**



**Drying Times** 

	23°C/73°F	60°C/140°F	80°C/176°F
Dust Free	2 hrs	40 mins	5 mins
Dry to Handle	3 hrs 30 mins	1 hr	7 mins
Dry to Tape	3 hrs 45 mins	1 hr 15 mins	10 mins
Recoatable	5 mins-72 hrs	5 mins-90 mins	5 mins-25 mins
Full Cure	3 days	90 mins	25 mins



Note

Drying times have been determined using test pieces of a thickness < 2 mm and for 20  $\mu$ m (0.8 mils) of dry film. Before accelerated drying  $\geq$  70°C (158°F), leave to flash off for at least 15 minutes at room temperature. To recoat F70-A top coat with another product, contact us. For the F70-A top coat infrared drying, contact us. MEK Resistance: After 10 hours at 23°c

\*N.A.: Not applicable



Theoretical Coverage

23 m $^2$ /L (937 ft $^2$ /gal) for 25  $\mu$ m (1 mil) dry (base and undiluted hardener)

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<u>Kg</u> <u>1 μm</u> Dry Film Weight

1.5



Volatile Organic Compounds 186 g/L or 1.55 lbs/gal (ISO 11890-1) and 397 g/L (3.31 lbs/gal) (ASTM D3960)



Gloss

Above 50 GU under 60°



Color

Grey BAC 707 (M9001), grey FS26251, White Dassault 001, White Dassault 0036, NORMDEF 2625



Flash Point

Base F70-A N.A.

Demineralized Water N.A.



Storage

Store the product dry and at a temperature between 5 and 35°C / 41 and 95°F per AkzoNobel Aerospace Coatings specification. Store in the original unopened containers. Storage temperature and shelf life may vary per OEM specification requirements. Refer to the container label for specific

storage life information.

Hardener F70-A

Shelf life 12 months for Touch-Up Kits stored between 5°C and 35°C (41°F and 95°F) in full and sealed original

N.A.

packaging.

Shelf life 5 - 35°C (41 -

95°F)

Base F70-A 18 months

Hardener F70-A 18 months

Demineralized Water N.A.

## **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.

## Revision date: August 2025 (supersedes April 2022) - 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. Brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel

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