

# VARNISH F80

## COATINGS FOR AIRCRAFT STRUCTURE PROTECTION

**AkzoNobel**

### Product information



Two-components epoxy varnish with a high chemical resistance. F80 Varnish is used to stop kerosene tanks vapours. It can be applied with a spraygun or with a brush or a foam in the case of repairs.

### Components



**Base F80**  
**Hardener / Catalyst F80**

### Specifications



**Qualified in accordance with:**  
Airbus: AIMS 04-04-008

Product information mentioned in the technical datasheet is given for information purposes and can differ from requirements of specifications above. In that case, customer requirements are valid for your application.

### Physical properties



**THEORETICAL COVERAGE**  
2,1 m<sup>2</sup>/L (35 ft<sup>2</sup>/gal) for 300 µm (12 mils) dry

**DRY FILM WEIGHT**  
1.1

**VOC**  
315 g/L (2.6 lbs/gal) according to ASTM D3960 and ISO 11890-1

**COLOR**  
Transparent

**SHELF LIFE / STORAGE**  
12 months for base and hardener stored between 5°C and 35°C (41°F and 95°F) in full and sealed original packaging.

**GLOSS LEVEL**  
20-80 GU at 60°

**NOTES**  
Gloss levels have been determined using glossmeter with an angle of incidence of 60°.  
The theoretical consumption value doesn't take into account the transfer efficiency for spray application.

### Surface preparation



F80 Varnish is fully compatible with structural protection systems such as P60-A Primer and F70-A topcoat, and with F69 direct adhesion topcoat as well.

For an application on fully cured primer, it is necessary to reactivate the surface with a light abrasion, and then clean with alcohol or Diestone DLS. It is also possible to reapply the Primer P60-A (recommended dilution of 2V to 2.5V), then apply the Varnish F80. In this case, a 30 minutes minimum recovery time at room temperature is needed.

All the recommendation mentioned above are given for information.

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Instructions for use



### SPRAY APPLICATION

#### MIXING RATIO

	Mixing ratio by weight	Mixing ratio by volume
Base	100	4 V
Hardener / Catalyst	23	1 V

#### MIXING PROCEDURE

Ideally, the unmixed products should be stored between 18°C and 25 °C (64°F and 77°F) for 24 hours before use. The mixing process should be done at a temperature between 15°C and 35°C (59°F and 95°F). Mix the base and the hardener until the mixture has a homogeneous color.

#### INDUCTION TIME

None

#### Spraying viscosity at 20°C / 68°F

65 +/- 10 KU at 20°C (68°F)

#### POT LIFE

1 hour 30 @ 23°C

#### NOTE

The varnish viscosity is not measurable with a viscosity flow cup. KREBS type viscosimeter can be used.

Pot life at 30°C (86°F) : 1 hour

Pot life at 35°C (95°F) : 30 minutes

Viscosities mentioned above are corresponding 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.

Instructions for use



### BRUSH APPLICATION

	Mixing ratio by weight	Mixing ratio by volume
Base	100	4 V
Hardener / Catalyst	23	1 V

#### MIXING PROCEDURE

Remove the safety ring, press the cap to release the F80 hardener. Shake the container for approximately 1 minute . Remove the cap to be able to apply the varnish F80 with a suitable brush or foam. If the material after shaking 1 minute is not homogenous please use a stick for further mixing (around 1 min) until the material is homogen.



Do not hermetically close TUKs after mixing base and hardener.

#### INDUCTION TIME

Not necessary

#### POT LIFE

1 hour 30 at 23°C (73.4°F), 1 hour at 30°C (86°F), 30 minutes at 35°C (95°F).

#### NOTE

In the case of repairs, foam application is recommended.

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### Application recommendations



#### CONDITIONS

**Temperature** 15°C to 35°C (59°F to 95°F)  
**Relative humidity** 20 % to 85 %

#### EQUIPMENT

**Pneumatic spraygun equipped with a pressure cup or a pressure pot** Nozzle 2.0 to 2.3 mm

#### DRY / WET FILM THICKNESS

**HUMID** : 500 to 600 µm (20 to 24 mils) / **DRY** : 300 to 400 µm (12 to 16 mils)

#### NUMBER OF COATS

To get 300 to 400 µm (12 to 16 mils) dry, apply 2 coats of F80 Varnish, 200 to 250 µm (8 to 10 mils) wet each, with a time interval of 20 to 40 minutes (between 15°C/59°F and 35°C/95°F).

#### EQUIPMENT CLEANING

Clean the equipment with a thinner compatible with epoxy paints such as Thinner D760.

#### NOTE

Spray with dry and oil-free air.

For an Airmix application you can follow the parameters below:

- Air Pressure : 1.6 to 2 bars (23 to 30 psi)
- Paint Pressure : 60 to 80 bars (870 to 1160 psi)
- Nozzle : 0.3 mm to 0.4mm (0.011 to 0.013 inches)

### Drying times



	18°C (64°F)	23 °C (73°F)	30°C (86°F)	50 °C (120°F)	60 °C (140°F)
<b>Dust free</b>	6 hours	4 hours	2 hours 30	1 hour 30	1 hour
<b>Dry to handle</b>	10hours	8 hours	6 hours	3 hours	2 hours
<b>Recoatable</b>	20 minutes to 9 days	20 minutes to 7 days	20 minutes to 7 days	20 minutes to 24 hours	20 minutes to 16 hours
<b>Fully Cured</b>	9 days	7 days	7days	24 hours	16 hours

#### NOTE

Drying times were determined on specimens/tests with a thickness < 2mm (80mils) and 350µm (14mils) for dry film.

Resistance to MEK:

At 23°C (73°F) resistant after 24 hours drying,  
At 50°C (120°F) resistant after 3 hours drying,  
At 60°C (140°F) resistant after 2 hours drying.

Before accelerated drying leave to flash off for at least 30 minutes at room temperature.

### Defects & corrections



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

### Health & Safety



See the material Safety Data Sheets.  
The MSDS are available through our website [www.mapaero.com](http://www.mapaero.com)

### Packing



The F80 Varnish base is available in 4 liters.  
The F80 Varnish is available in 1 liters.  
The F80 Varnish is available in 45mL Touch Up Kit (TUK) (6 months Shelf life).

**WARRANTY** : We guarantee our products against hidden defaults over material and preparation. Our Responsibility is limited to the obligation of freely replacing the defective material without there being a claim for any compensation. The advice we give is based on our experience but it might not be absolutely right. Consequently this does not imply our responsibility in case of inefficiency. Furthermore our company cannot be responsible for any material or corporal damages caused due to a misuse or mishandling of our products. Any concession to these clauses, to be valid, must be an official document issued by our offices and signed by our direction.