

# TOPCOAT FR280-AD

## FIRE RETARDANT FINISHES FOR CABIN INTERIORS

**AkzoNobel**

### Product information



Three-component water-based non-slip polyurethane topcoat, used for helicopter cabins.

### Components



**Base** FR280-AD  
**Hardener / Catalyst** FR2-55  
**Thinner** Water

### Specifications



**Qualified in accordance with:**  
Airbus Helicopters : ECS 2172 and ECS 2050

**Meets the following requirements:**  
JAR / FAR Part 25 §25.853 (a) + (c / d) / Change 14 / Amdt. 25-83

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**  
2.6 m<sup>2</sup>/kg (510 ft<sup>2</sup>/gal) for 150 µm (5.9 mils) dry (base and hardener undiluted)

**DRY FILM WEIGHT**  
1.4

**VOC**  
50g/L (ISO 11890-1) and 130g/L (ASTM D3960)

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

**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



**Metallic surface:**  
Recoat previously the anticorrosive epoxy primer, then blow and clean the piece with a lint-free cloth dampened with isopropyl alcohol before applying the top coat.

**Composites parts:**  
Recoat previously the anticorrosive epoxy primer, then blow and clean room with a lint-free cloth dampened with isopropyl alcohol before applying the top coat.

**Thermoplastics:**  
Recoat the thermoplastic previously using an orbital Sander with sandpaper grade 240 to 400, then blow and clean the part with a lint-free cloth wet with isopropyl alcohol before applying the top coat.

All recommendations 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	20	1 V
Water	30 to 40	1.6 V to 2.1 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.

Mixing by weight is recommended.

The FD280-AD base should be mixed for 10min in pneumatic or oscillating mixer before use.

Mixing the base and the hardener until the material is homogen. Then add the water

The material must be made at a temperature between 15°C (59°F) and 35°C (95°F)

#### INDUCTION TIME

None

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

Dilution rate by weight	ISO 6	AFNOR 4
30%	17s ± 4s	28s ± 6s

#### POT LIFE

3 hours

#### NOTE

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.

ISO 6 cup is the reference cup. The others are given for information purposes.

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

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### Application recommendations



#### CONDITIONS

**Temperature** 15 °C (59°F) to 35 °C (95°F)  
**Relative humidity** 20 % to 70%

#### EQUIPMENT

**Gravity compressed air gun** Nozzle 2.2 mm

#### DRY / WET FILM THICKNESS

150 to 300 µm (6 to 12 mils) dry/350 µm to 700 µm (14 to 28 mils) wet.

#### NUMBER OF COATS

Apply several coats to achieve 150 µm to 300 µm (6 to 12 mils) dry thickness.

#### EQUIPMENT CLEANING

Clean the equipment with an appropriate cleaning thinner, such as Mapaero D770-B.

#### NOTE

Spray with dry, oil-free air.

### Drying times



#### Dust free

**23°C(73°F)**

1 hours

**40°C (104°F)**

N.A

**60°C (140°F)**

N.A

#### Dry to handle

8 hours

4hours

1hour

#### Fully Cured

7 days

3 days

12 hours

#### NOTE

Drying times have been determined using tests pieces of a thickness < 2mm and 225µm (8.8mils) of dry film.

\*N.A. : Not applicable

### Defects & corrections



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

### Health & Safety



See the product Safety Data Sheet.

The MSDS are available through our website [www.mapaero.com](http://www.mapaero.com)

### Packing



The FR280-AD base is available in 1 kg and 5 kg.  
The FR2-55 hardener is available in 1 kg and 5 kg.

**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.