

# TOPCOAT FRC SEMI-GLOSS

## FIRE RETARDANT FINISHES FOR CABIN INTERIORS

AkzoNobel

### Product information



Three-component polyurethane water-based topcoat, direct by textured for aircraft interiors.  
Semi-gloss FRC topcoat can be applied on cabin interior primers FR1-55 and FR4-45 or directly on plastics.

### Components



**Base SEMI-GLOSS FRC**  
**Hardener / Catalyst SEMI-GLOSS FRC**  
**Thinner Water**

### Specifications



#### Qualified in accordance with:

STELIA  
FACC

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

7.5 m<sup>2</sup>/kg (305 sq.ft/gal) for 50 µm (2 mils) dry

#### DRY FILM WEIGHT

1.7

#### VOC

60 g/L or lbs/gal(ISO 11890-1) and 130 g/L or lbs/gal (ASTM D3960)

#### COLOR

Please consult us

#### 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.

#### GLOSS LEVEL

8-11 GU below 60°

#### NOTES

Flash point: >100°C (212°F) base and >60°C (140°F) hardener. Gloss levels have been determined using glossmeter with an angle of incidence of 60°C. The theoretical consumption value doesn't take into account the transfer efficiency for spray application

### Surface preparation



#### - Application on plastics (polycarbonate type):

Without surface defects, FRC can be applied directly onto thermoplastics. The substrate should be sanded with P240 to P400 grade paper. It should be blown and cleaned with isopropyl alcohol. Contact us for information on uses on other support or surface treatments.

#### - Application on water-borne primers (FR1-55 or FR45-45):

Semi-gloss FRC top coat should be applied between 4 hours and 24 hours after application of FR1-55 (temperature between 15°C and 25°C or 59°F and 77°F) or between 3 hours and 24 hours after application of FR4-45 (temperature between 15°C and 25°C or 59°F and 77°F). In any case, it's better to sand the surface of the primer with P400 paper then clean with a suitable solvent.

#### - Application on aluminium:

Semi-gloss FRC top coat should be applied on a system consisting of:

- 1) -Surface treatment (anodizing, conversion)
- 2) -Epoxy corrosion resistant primer (F69 from Mapaero)

It is recommended to force-cure the primer 1 hour at 60°C (140°F) before applying Semi-gloss FRC top coat.

All 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 | 20                     | 1 V                    |
| Water               | 15 to 25               | 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. Semi-gloss FRC base should be rehomogenised with a pneumatic stirrer or oscillating mixer before use. Mixing by weight is recommended. Add first the hardener to the base. Mix homogeneously before adding the water. The mixture 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    |
|-------------------------|----------|
| 20%                     | 18s ± 3s |

#### POT LIFE

3 hours for a 20% dilution by weight

#### NOTE

NB: Light colors require low dilution (15%-20%) whereas adark colors require higher dilution (20%-25%)

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.

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.

Application recommendations



#### CONDITIONS

Temperature 15°C to 35°C (59°F to 95°F)

Relative humidity 30% to 70%

#### EQUIPMENT

Gravity compressed air gun 1.4 to 1.8 mm (0.5 to 0.7 inches)

#### DRY / WET FILM THICKNESS

40 µm to 60 µm dry (1.6 to 2.4 mils)/80 µm to 120 µm wet (3.1 to 4.7 mils)

#### NUMBER OF COATS

Follow recommended instructions and apply 1 or 2 crossed coats. The recommended dynamic air pressure is 2 bar ± 0,5 bar (22).

#### EQUIPMENT CLEANING

Clean equipment with water, then with a suitable cleaning thinner.

#### NOTE

Spray with dry and oil-free air.

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### Drying times



**Dust free**  
**Dry to handle**  
**Fully Cured**

**23°C (73°F)**

60 minutes  
6 hours  
7 days

**40°C (104°F)**

N.A.\*  
3 hours  
3 days

**60°C (140°F)**

N.A.\*  
1 hour  
12 hours

#### NOTE

Drying times have been determined using tests pieces of a thickness < 2mm for 50µm (2mils).

\*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 base Semi-gloss FRC is available in 1 kg and 5 kg.  
The hardener Semi-gloss FRC 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.