

SURFACER FRS30

FIRE RETARDANT FINISHES FOR CABIN INTERIORS

AkzoNobel

Product information



Three-component solvent-borne polyurethane surfacer for aircraft interiors. It is intended to correct surface defects such as pin holes on composite and thermoplastic substrates.

Components



Base FRS 30
Hardener / Catalyst FRS
Thinner FRSL

Specifications



Qualified in accordance with:
Airbus: AIMS 04-08-001, CML 16-046A, ABS 5650A, CML-04-BAM6
FACC FMS 5520 class 1

Pilatus : PMS0600-52-02

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
6 m²/kg (510 ft²/gal) for 50 µm (2 mils) dry (base and hardener undiluted)

DRY FILM WEIGHT
2.0

VOC
570 g/L (ISO 11890-1 and ASTM D3960) for a 20% dilution.

SHELF LIFE / STORAGE
24 months for the base and hardener, 48 for the thinner, stored between 5°C and 35°C (41°F and 95°F) in full and sealed original packaging.

GLOSS LEVEL
Matt (lower than 10 GU at 60°)

NOTES
Flash point:> 25°C (77°F)
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



The substrate should be sanded with sandpaper grade:
- P240 to P400 for thermoplastics;
- P100 to P180 for Phenolic composites.
It must then be cleaned with a lint-free cloth and an alcohol based cleaner such Isopropanol.

Note: Direct application on polycarbonate substrate is not recommended. Use instead a water-borne primer FR1-55 (or FR4-45).
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	15 V
Hardener / Catalyst	5	1 V
Thinner	10 to 30	2 V to 5 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.

Mix the base and hardener until the mixture is homogeneous.

Then add the thinner and mix.

Note : It is recommended to sieve the mixture diluted using a 150-190µm (5.9-7.5 mils) filter.

INDUCTION TIME

None

Spraying viscosity at 20°C / 68°F

Dilution rate by weight	ISO 6
15-20%	20s ± 5s

POT LIFE

6 hours for a 20% dilution

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.

Instructions for use



BRUSH APPLICATION

	Mixing ratio by weight	Mixing ratio by volume
Base	100	8 V
Hardener / Catalyst	10	1 V
Thinner	0 to 5	1 V to 2 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.

Mix the base and hardener until the mixture is homogeneous.

Then add the thinner.

Note : It is recommended to sieve the mixture diluted using a 120-150 (5-6mils) filter.

INDUCTION TIME

None

POT LIFE

1 hour for a 5% dilution

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Application recommendations



CONDITIONS

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

Relative humidity 20% to 80%

EQUIPMENT

Gravity compressed air gun Nozzle 1.8 mm to 2.2 mm

Brush

DRY / WET FILM THICKNESS

20-100 µm (0.8 to 4 mils) dry/50 µm to 200 µm (2 to 8 mils) wet

NUMBER OF COATS

Spray gun:

Follow recommendations above and apply the product in crossed coats, pressure 3 bars (44 psi) +/- 0.5 (7 psi) dynamic to achieve the desired thickness (approximately 2 crossed coats for 80 µm or 3.1 mils dry). To apply more thick, leave the first coat drying around 15 minutes, before applying the second one (to obtain a matt finish).

Brush (fine hairs) :
1 coat.

EQUIPMENT CLEANING

Clean the equipment with a suitable solvent such as FRSL from Mapaero.

NOTE

Spray with dry, oil-free air.

Drying times



Dust free
Dry to sand
Fully Cured

23°C (73°F)

10 minutes
4 hours
7 days

60°C (140°F)

NA*
1 hour
12 hours

80°C (176°F)

NA*
30 minutes
8 hours

NOTE

Drying time have been determined using test pieces of a thickness <2mm for 60µm (2.4 mils) dry film.

*NA: Not applicable.

Defects & corrections



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

In event of a defect, the FR30 primer can be slightly sanded with paper grade 240 to 400, before reapplying the same product or a solvent-based top coat.

The sanded top coat must be blown and wiped with a lint free cloth wet with isopropyl alcohol.

Health & Safety



See the product Safety Data Sheets.

The MSDS are available on our website www.mapaero.com

Packing



The base FR30 is available in 1 kg and 5 kg.
The hardener FRS is available in 1 kg and 5 kg.
The thinner FRSL is available in 1 L and 5 L.

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.