

VARNISH 1500 HD

FIRE RETARDANT FINISHES FOR CABIN INTERIORS

AkzoNobel

Product information



Three-component, solvented, low VOC, very high surface hardness polyurethane varnish, for the passenger cabin interiors. The varnish 1500 HD is recommended to be applied on the FRS40 polyurethane topcoat, FRS40 polyurethane metallic topcoat and wood.

Components



Base 1500 HD
Hardener / Catalyst 1500 HD
Thinner P2 or P2-2

Specifications



Qualified in accordance with:
C&D Zodiac : CDM240-00, CDM240-01
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
9 m²/kg for 50 µm (2 mils) dry

DRY FILM WEIGHT
1.13

VOC
510 g/L (4.33 lbs/gal) according to ASTM D3960

COLOR
Transparent

SHELF LIFE / STORAGE
24 months for base and hardener, 48 months for thinner between 5°C and 35°C (40°F and 95°F) in full and sealed original packaging.

GLOSS LEVEL
>90 GU at 60°

NOTES

Flash point : >23°C (>73°F) base and hardener.
Compatible with solvented polyurethane top coats.
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



Application on solvented finition (type FRS40 or metallic FRS40)

For applications on composites or corrections of significant surface defects, it is recommended to use FRS30 as a primer before using FRS40 polyurethane top coat or FRS40 metallic polyurethane top coat.

Application on wood

- Apply one coat with 30% dilution, allow to dry at least for 8 hours at room temperature. Some wood veneers may degas during the solvent evaporation. The more the first coat is diluted and thin, the less this phenomenon will be noticed. The first coat must be sanded down to the substrate before applying following coats. Then, apply one or two crossed coats in order to obtain a thickness from 40 to 60 µm (1.6 to 2.4 mils) dry.
- Allow to dry at least for 8 hours at room temperature. Sand with very fine sandpaper (grade 800-1200 or 2000).
- Repeat this process at least 6 times, depending on the application and the type of wood.

All recommendations mentioned above are given for information.

VARNISH 1500 HD

FIRE RETARDANT FINISHES FOR CABIN INTERIORS

AkzoNobel

Instructions for use



SPRAY APPLICATION

MIXING RATIO

	Mixing ratio by weight	Mixing ratio by volume
Base	100	2 V
Hardener / Catalyst	50	1 V
Thinner	15 to 50	0.3 V to 0.6 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 mixture by weight is recommended.

Mix the base and the hardener until the mixture is homogeneous. Then add the thinner. Thinner P2 is the preferred thinner to be used. Thinner P2-2 can be used in case of high temperature and humidity condition to avoid solvent popping during drying.

Remark : It is recommended to sieve the material with a 90-125µm (3.5-5 mils) filter before application.

INDUCTION TIME

None

Spraying viscosity at 20°C / 68°F

Dilution mixing volume Ratio	AFNOR 4 cup	ISO 4 cup	FORD 4 cup
30%	20 s +/- 3 s	35 s +/- 5 s	21 s +/- 3 s

POT LIFE

For a 30% dilution : 2 hours

A lower dilution will significantly reduce the pot life.

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

Application recommendations



CONDITIONS

Temperature from 15°C to 35°C (from 60°F to 95°F)

Relative humidity 30 % to 80 %

EQUIPMENT

Pneumatic spray gun gravity Nozzle 1.2 mm to 1.8 mm (0.06 to 0.07 inch)

DRY / WET FILM THICKNESS

20 µm to 100 µm dry (0.8 to 4 mils) / 40 µm to 200 µm humid (1.6 to 6 mils)

NUMBER OF COATS

Follow the above recommendations and apply the product in crossed coats, dynamic pressure of 2.5-3 bars (35-40 psi), in order to obtain the desired thickness (about 2 crossed coats for 60 µm dry / 2.4 mils).

EQUIPMENT CLEANING

Clean the equipment with the THINNER P2 or an appropriate cleaning thinner.

NOTE

Spray with dry oil-free air.

The brush application is not recommended.

VARNISH 1500 HD

FIRE RETARDANT FINISHES FOR CABIN INTERIORS

AkzoNobel

Drying times



NOTE

Tack free
Dry to sand
Recoatable
Fully cured
Polishable

23°C / 73°F

6 hours
8 hours
6 to 72 hours
7 days
8 hours

40°C / 104°F

4 hours
6 hours
4 to 48 hours
4 days
6 hours

60°C / 140°F

1 hour
1 hour
1 to 6 hours
12 hours
1 hour

A minimum time of desolvantion of a least 60minutes is required before any accelerate drying.
Drying times have been determined using tests pieces of a thickness < 2mm for 50µm (2mils) of dry film.
*N.A. : Not applicable

Defects & corrections



In the event of a defect, contact your Quality Department.
In case of small thickness: After 8 hours drying at 23°C (73°F), abrade slightly the surface (P1500 or more) and reapply.
In case of high thickness: After 8 hours drying at 23°C (73°F), eliminate drips by sanding with P600 grade sandpaper, then reapply.
In the case of micro-bubbling, refusal, many inclusions: Please contact our Quality Department.

Health & Safety



See the Product Safety Data Sheet.
MSDS are available through our website www.mapaero.com

Packing



The base 1500 HD is available in 1L and 5L.
The hardener 1500 HD is available in 0,5L, 1L and 5L.
The P2 thinner is available in 1L and 5L.

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.