

VARNISH A1500-UVR

FINISHES FOR AIRCRAFT EXTERIORS

AkzoNobel

Product information



Three-component flexible polyurethane topcoat, with high chemical resistance, used for exterior protection of aircrafts. The varnish has a good resistance to UV.

Components



Base A1500-UVR
Hardener / Catalyst A1000 or A1000 BRUSH
Thinner P2

Specifications



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 m²/L (937 sq.ft/gal) for 50 µm (2 mils) dry (base and hardener undiluted)

DRY FILM WEIGHT

1.1

VOC

520 g/L or 4.3 lb/gal (ISO11890-1 and ASTM D3960)

SHELF LIFE / STORAGE

48 months for the base, hardener and thinner stored between 5°C and 35°C (41°F and 95°F) in full and sealed original packaging.
6 months for Touch-Up Kits (TUK), stored between 5°C and 35°C (41°F and 95°F) in full and sealed original packaging.

GLOSS LEVEL

Gloss, satin, matt

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



Base Coat/Clear Coat system:

The A1500 UVR can be applied directly on the last coat of Base Coat F14 from Mapaero, as shown on the technical data sheet of the product, in order to give a shiny appearance, but also resistance to UV and to external ageing.

A1000/A1500-M/A1500-UVR:

Abrase slightly A1000 or A1500-M or A1500-UVR finish, then the varnish can be applied.

Note: Direct application of the varnish on metal without prior test is not recommended.

All recommendations mentioned above are given for information.

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Instructions for use



SPRAY APPLICATION

MIXING RATIO

Base

Hardener / Catalyst

Thinner

Mixing ratio by weight

100

94

0 to 25

Mixing ratio by volume

1 V

1 V

0 V to 0, 25 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 A1500-UVR base should be mixed for 10 minutes in a pneumatic or oscillating mixer.

Mix the base and the hardener until the mixture is homogeneous before adding the thinner.

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

Remark : It is recommended to sieve the mixture through a 80-150 µm (3.1-5.9 mils) filter.

INDUCTION TIME

None

Spraying viscosity at 20°C / 68°F

CA 4

CA 2.5

13 to 14 s 40 to 45 s

POT LIFE

6 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.

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

Instructions for use



BRUSH APPLICATION

Base

Hardener / Catalyst

Mixing ratio by volume

2 V

1 V (A1000 BRUSH)

MIXING PROCEDURE

Remove the safety ring and press down on the cap to release the A1500-UVR hardener. Shake the container for approximately 1 minute. Remove the cap to apply the A1500-UVR varnish with a suitable brush.



Do not hermetically close TUKS after mixing base and hardener.

POT LIFE

3 hours at 23°C (73°F)

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Application recommendations



CONDITIONS

Temperature 15 °C (59°F) to 35 °C (95°F)
Relative humidity 30% to 75%

EQUIPMENT

Gravity compressed air gun Nozzle 1.2 mm to 1.8 mm
Electrostatic spray gun

DRY / WET FILM THICKNESS

40-60 µm (1.6 to 2.4 mils) dry/115 µm to 175 µm (4.5 to 6.9 mils) wet

NUMBER OF COATS

Apply a crossed coat, let it dry for 20 to 90 minutes until the solvent has flashed off. Then apply one or more crossed coat (well wet) to get 40 µm to 60 µm (1.6 to 2.4 mils) dry thickness.

EQUIPMENT CLEANING

Clean the equipment with an appropriate cleaning thinner, such as Mapaero P2.

NOTE

Spray with dry, oil-free air.

Drying times



Dust free Fully Cured

23°C (73°F)
7 hours to 9 hours
7 days

60°C (140°F)
1 hour
12 hours

NOTE

Drying times have been determined using tests pieces of a thickness < 2mm for 50µm (2mils) of dry film. For an application with brush, use preferably the hardener A1000 BRUSH, specific to this application. Touch-up kits are available.

*N.A. : Not applicable

Defects & corrections



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

Health & Safety



See the product Security Data Sheets.

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

Packing



The A1500-UVR is available in 1 L and 5 L.
The A1000 hardener is available in 1 L and 5 L. The A1000 Brush hardener is available in 0.5L and 2.5L.
The thinner P2 is available in 1 L and 5 L.
Varnish A1500-UVR is also available in 45 ml Touch up kit (TUK): 30 ml A1500 UVR base + 15 ml A1000 hardener.

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.