

TOPCOAT A1000

FINISHES FOR AIRCRAFT EXTERIORS

AkzoNobel

Product information



Three component flexible polyurethane topcoat with high chemical resistance, used for exterior decoration of aircraft. The topcoat has good UV resistance.

Components



Base A1000

Hardener / Catalyst A1000 or A1000 BRUSH

Thinner P2, PU n° 4, Brush extra slow, accelerator 702, thinner D712, retarder

Specifications



Qualified in accordance with:

AIRBUS : TNA 10028

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/l for 40 µm (1.6 mils) dry (base and hardener undiluted)

DRY FILM WEIGHT

1.5 (approximately for white)

VOC

660 g/L (ISO 11890-1 and ASTM 3960)

COLOR

All color chart and color matching

SHELF LIFE / STORAGE

48 months for the base and the thinner P2 stored between 5°C and 35°C (41°F and 95°F) in full and sealed original packaging. 24 months for the hardener stored between 5°C and 35°C (41°F and 95°F) in full and sealed original packaging..

GLOSS LEVEL

>90 GU (gloss)/10 GU - 90 GU (semi-gloss)/3 GU - 10 GU (matt)/3 GU (extra 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



Application preferably on anticorrosion primary previously sanded using an orbital sander and sandpaper grade 240 to 400. The substrate must be blown dried and then cleaned with a lint-free cloth wet with isopropyl alcohol.

All recommendations mentioned above are given for information.

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Instructions for use



SPRAY APPLICATION

Base
Hardener / Catalyst
Thinner

Mixing ratio by volume

1 V
1 V
0 V to 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

The A1000 base should be mixed for 10 minutes in a pneumatic or oscillating mixer before use.

Mix the base and hardener and possibly thinner until complete homogenization.

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 paint through a 80-150 µm (3.1-6 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.

CA4 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

NOTE

For an application with the brush, prefer the use of hardener A1000 BRUSH, specific to this application.

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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

DRY / WET FILM THICKNESS

40 µm to 100 µm or 1.6 mils to 4 mils dry (according to shades)

NUMBER OF COATS

Apply 1 crossed layer, let it dry 30 minutes to 1 hour until the solvent has evaporated. Then apply one or more crossed coats (well wet) for 40 µm to 100 µm (1.6 to 4 mils) dry.

In case of not covering colours (yellow, red, some green and blue), apply a coat of grey A1000 as first layer.

Light grey ref. 12927100B005L for the yellow.

Medium grey ref. 12927200B005L for the reds and oranges.

Dark grey ref. 12927300B005L for some blue and green.

EQUIPMENT CLEANING

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

NOTE

Spray with dry, oil-free air.

Drying times



Recoatable Fully Cured

23°C (73°F)
2 hours to 72 hours
7 days

60°C (140°F)
15 minutes to 9 hours
12 hours

NOTE

Drying times have been determined using tests pieces of a thickness < 2mm for 70µm (2.8mils) of dry film. Flash off 30 to 60 minutes at 23°C (73°F) before steaming.

* NA: 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.

Packing



The base A1000-A is available in 1 L and 5 L.

The hardener is available in 1 L and 5 L.

The thinner P2 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.