## FINISHES FOR AIRCRAFT EXTERIORS

## **AkzoNobel**

### **Product information**



Three components strontium chromate-based epoxy primer, with high chemical resistance. This product is designed for the protection of metallic structures on aircraft. The topcoat AEROPRIM 530 is recommended for use with a topcoat such as AEROMAP A1500-M.

#### Components



Base AEROPRIM 530 Hardener / Catalyst AEROPRIM 530 Thinner E

#### 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

17 m<sup>2</sup>/L (937 sq.ft/gal) for 20  $\mu$ m (0.8 mils) dry (base and hardener undiluted)



600 g / L (base + hardener + thinner) for a 45% dilution (ISO 11890-1 and ASTM D 3960)

Sand Yellow 21 530 000 B, blue 21 530 100 B, dark green 21 530 200 B

## SHELF LIFE / STORAGE

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

## **GLOSS LEVEL**

20 GU below 60°

Gloss levels have been determined using glossmeter with an angle of incidence of 60°C. The theorical consumption value doesn't take into account the transfer efficiency for spray application

#### Surface preparation



AEROPRIM 530 primer is used particularly on aluminium alloys that have had the following treatments: **Alodine 1200**: Cr6 conversion

CAA: Chromic Acid Anodising Anodic oxidation sulphuric

TSA: Oxydation anodique tartrique

BAA: Boric Acid Anodising

Observe the recoating time between the surface treatment and painting. This may vary depending on the treatment and industrial instructions. Contact us for information on uses on other metallic structures, surface treatments or paints.

All recommandations 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 1 V Base 100 **Hardener / Catalyst** 58 1 V Thinner 30 to 60 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 A530 primer base should be mixed for 10 minutes in a pneumatic or oscillating mixer before use. The mixture by weight is recommended.

Mix the base and the hardener until the mixture is homogeneous. Then add the thinner E in two stages. The mixture must be made at a temperature between 15°C and 35°C (60-95°F) Remark: It is recommended to sieve the mixture through a 120-150µm (4.7-5.9mils) filters.

#### INDUCTION TIME

Spraying viscosity at 20°C / 68°F

CA 4 **CA 2.5** 

14 to 16 s 40 to 60 s

#### **POT LIFE**

8 hours or 4 hours at 30 °C (86°F).

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.

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

Application recommendations



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

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

## **DRY / WET FILM THICKNESS**

15 μm to 25 μm (0.6 to 1 mils) dry

## NUMBER OF COATS

The number of coats depends on the size and the shape of the part to which it is being applied. The recommended dynamic air pressure is 1.5 bar to 4 bar (22 to 58 psi).

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

Spray with dry and oil-free air.

# PRIMER A530 FINISHES FOR AIRCRAFT EXTERIORS

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**Drving times** 



Recoatable **Fully Cured** 

23°C (73°F) 4 hours to 72 hours 7 days

60°C (140°F) 1 hour to 24 hours

NOTE

Drying times have been determined using tests pieces of a thickness < 2mm for 20µm (0.8mils) of dry film.

\*N.A.: Not applicable

**Defects & corrections** 



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

Before drying into the oven, leave to flash off 30 minutes at room temperature.

Apply a thin coat of AEROPRIM 530 to achieve the required thickness. If the above recommended recoating time is exceeded, reactivate with Scotch-Brite.

### If there are micro-bubbles, running, rejects or numerous inclusions:

Reactivate the surface using an abrasive paper (grade 220 to 320), remove the dust then clean the surface using an approved cleaning product. Apply a thin coat of AEROPRIM 530 to achieve the desired thickness.

## In case of significant defects:

Remove the AEROPRIM 530 primer with an approved chemical paint remover or remove using a plastic medium (in this case, the surface treatment has to be repeated).

Health & Safety



See the product Safety Data Sheet.

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



The AEROPRIM 530 base is available in 1 L and 5 L for the Sand Yellow and 2 L for the other colors. The AEROPRIM 530 hardener is available in 1 L and 5 L.

The thinner E 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.