

TOPCOAT XS420 METALLIC

COATINGS FOR AIRCRAFT STRUCTURE PROTECTION

AkzoNobel

Product information



Three-components polyurethane topcoat with high solid content and high chemical resistance, used for structural and external applications. It is recommended to use XS420 Metallic topcoat in combinaison with MAPAERO chromate-free corrosion resistant primer SP350.

Components



**Base XS420 Metallic
Hardener / Catalyst XS420
Thinner 713**

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
13m²/L for 40µm (1.6mils) for ready-to-use mixrure

DRY FILM WEIGHT
1.2

VOC
420g/L (ISO11890-1 et ASTM D 3960)

SHELF LIFE / STORAGE
12 months for the base and 18 months for the hardener stored between 5°C and 35°C (41°F and 95°F) in full and sealed original packaging.
5 years for the thinner stored between 5°C and 35°C (41°F and 95°F) in full and sealed original packaging.

GLOSS LEVEL
10-45 GU at 60°

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



The XS420 Metallic Top Coat is intended to use on metallic substrates (steel, aluminium alloys) coated with a surface treatment (anodisation, conversion) and an epoxy primer for adhesion and corrosion protection (such as SP350).
Application of SP350 -> See SP350 Technical Data Sheet.

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	2V
Hardener / Catalyst	50	1V
Thinner	40	1V

MIXING PROCEDURE

Ideally, the unmixed products should be stored between 18 and 25°C (64.4 and 77°F) during 24 hours before use. The XS420 Metallic Base should be mixed during 5 minutes in a pneumatic or oscillating mixer before use. Mix the base, hardener and thinner until the mixture is homogenous. the preparation should be carried out between 15 and 35°C (59 and 95°F).

INDUCTION TIME

None

Spraying viscosity at 20°C / 68°F

CA 4	ISO 4
1V	1V
19 +/- 5s	35 +/- 5s

POT LIFE

4 hours at 23°C (73.4°F)

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.

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Application recommendations



CONDITIONS

Temperature 15 to 35°C (59 to 95°F)

Relative humidity 30% to 85%

EQUIPMENT

Gravity compressed air gun Nozzle 1.3mm to 1.8mm

DRY / WET FILM THICKNESS

20 to 40µm (0.8 to 1.6mils) dry / 40 to 80µm (1.6 to 3.2mils) wet

NUMBER OF COATS

Number of coats depends on the size and the shape of the part to which it is being applied.

Apply 1 coat, wait 10 to 15 minutes until obtain a semi gloss aspect, then apply a crossed coat.

EQUIPMENT CLEANING

Clean the equipment with an appropriate thinner, such as MAPAERO D713

NOTE

Spray with dry and oil-free air

Drying times



NOTE

	23°C (73.4°F)	40°C (104°F)	60°C (140°F)	80°C (176°F)	100°C (212°F)
Dry to touch	10 hours	8 hours	4 hours	2 hours	1 hour
Dry to handle	10 hours	8 hours	4 hours	2 hours	1 hour
Dry to tape	8 hours	5 hours	2 hours	1 hour	30 minutes
Fully cured	7 days	3 days	12 hours	6 hours	4 hours

Drying times have been determined using test pieces of a thickness <2mm and for 40µm (1.6mils) of dry film.
For an accelerated drying (>40°C; >104°F) flash off time should be at least 30 minutes.

*N.A. : 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

Packing



The base is available in 3L.

The hardener is available in 1L.

The thinner is available in 1L and 5L.

XS420 Metallic is also available in 1L Kit (500 mL Base, 250 mL Hardener, 250 mL Thinner)

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.