

XS420 Metallic Topcoat

Technical Data Sheet

Product Group

Polyurethane Top Coat

Characteristics

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 combination with AkzoNobel chromate-free corrosion resistant primer SP350.



Product Information

Components

Base	XS420-M Base Metal
Hardener	XS420 Hardener
Thinner	713 Thinner



Specifications

AkzoNobel Certification



Qualified Product List

Product specifications change constantly, to ensure the most accurate information regarding specifications, please check our online qualified product list (QPL) at aerospace.akzonobel.com/products

Surface Conditions

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



Surface Preparation/
Cleaning

Instruction for Use

	Volume	Weight
XS420-M Base Metal	2 parts	100 parts
XS420 Hardener	1 part	50 parts
713 Thinner	1 part	40 parts



Spray Application (Mix Ratio)

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

Not Applicable.



Initial Spraying Viscosity
(20°C/68°F)

Spraying viscosity at 20°C / 68°F
CA 4 ISO 4
1 V 1 V
19 ± 5s 35 ± 5s



Note

Viscosity measurements are provided as guidelines only and are not to be used as quality control parameters. Certified information is provided by certification documentation available on request.




Pot life (23°C/73°F)


4 hours at 23°C (73.4°F).


XS420 Metallic Topcoat


	Dry Film Thickness (DFT)	20 – 40 µm 0.8 – 1.6 mils
	Wet Film Thickness (WFT)	40 – 80 µm 1.6 – 3.2 mils


Application Recommendations

	Conditions	Temperature:	15 – 35 °C 59 – 95 °F
		Relative Humidity:	30 – 85 %

 Conditions XS420 Metallic Topcoat may be applied in conditions outside of the limits shown above. However, it is recommended to be careful to ensure a satisfactory result. Please contact your local AkzoNobel Aerospace Coatings representative to determine the proper application techniques when environmental conditions are outside of the recommended range.


	Equipment Recommendation	Gravity compressed air gun - Nozzle 1.3mm to 1.8mm.
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	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.
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
	Cleaning of Equipment	Clean the equipment with an appropriate thinner, such as thinner 713 from AkzoNobel.
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	Note	Spray with dry and oil-free air.
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Physical Properties






	Drying Times		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 hrs	8 hrs	4 hrs	2 hrs	1 hr
		Dry to handle	10 hrs	8 hrs	4 hrs	2 hrs	1 hr
		Dry to tape	8 hrs	5 hrs	2 hrs	1 hr	30 mins
		Fully Cured	7 days	3 days	12 hrs	6 hrs	4 hrs

 Note 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.

	Theoretical Coverage	13m ² /L for 40µm (1.6mils) for ready-to-use mixture. The theoretical consumption value doesn't take into account the transfer efficiency for spray application.
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	Dry Film Weight	1.2 (g/m ² /µm)
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XS420 Metallic Topcoat

	Volatile Organic Compounds	420g/L (ISO11890-1 and ASTM D 3960)	
	Gloss (60°)	10 – 45 GU	
	Note	Gloss levels have been determined using glossmeter with an angle of incidence of 60°.	
	Flash Point	XS420-M Base Metal	Between 23 °C (73 °F) and 60 °C (140 °F)
		XS420 Hardener	Between 23 °C (73 °F) and 60 °C (140 °F)
		713 Thinner	Between 23 °C (73 °F) and 60 °C (140 °F)
	Storage	Store the product dry and at a temperature between 5 and 35°C / 41 and 95°F per AkzoNobel Aerospace Coatings specification. Store in the original unopened containers. Storage temperature and shelf life may vary per OEM specification requirements. Refer to the container label for specific storage life information.	
	Shelf life 5 - 35°C (41 - 95°F)	XS420-M Base Metal	18 months
		XS420 Hardener	18 months
		713 Thinner	48 months

Safety Precautions

Comply with all local safety, disposal and transportation regulations. Check the Material Safety Data Sheet (MSDS) and label of the individual products carefully before using the products. The MSDS's are available on request.

Revision date: June 2026 (supersedes October 2024) - FOR PROFESSIONAL USE ONLY

IMPORTANT NOTE

The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given is subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product. Brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel