

SP350 Primer

Technical Data Sheet

Product Group

Epoxy Primer

Characteristics



Product Information

Chromate free high solid epoxy primer three component used for corrosion protection, SP350 is used to protect aircraft metallic parts. This product has good adhesion and chemical resistance properties, especially on aluminium alloys. SP350 can be used with AkzoNobel high solid polyurethane topcoat XS420.

Components



Base	SP350 Base
Hardener	SP350 Hardener
Thinner	SP350 Plus Thinner

Specifications



Qualified Product List

Safran Aircraft Engines	DMR74-130
Safran Landing Systems	IFC30-125-06
Safran Nacelles	HMRC0149A

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

Surface Conditions



Surface Preparation/
Cleaning

SP350 primer should be applied on aluminium alloys with following surface treatments :

- MIL-DTL-5541 : Cr6 conversion
- CAA: Chromic Acid Anodizing sealed or unsealed
- SAA: Anodic Sulfuric Chromic sealed or unsealed
- TSA: Tartric Sulphuric Anodizing sealed or unsealed

For Open time information and cleaning process prior to paint application, please contact your quality department
Contact us for information on uses on other substrate or surface treatments.

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

Instruction for Use



Spray Application (Mix Ratio)

	Volume	Weight
SP350 Base	8 parts	100 parts
SP350 Hardener	1 part	11 parts
SP350 Plus Thinner	0-1 part	0-10 parts

MIXING PROCEDURE

The use of SP350 Plus thinner is highly recommended.
Ideally, the unmixed products should be stored between 18°C (64°F) and 25°C (77°F) for 24 hours before use.

- The SP350 base should be stirred for 5 minutes in a pneumatic or oscillating mixer before use.
- Mix the base and hardener until the mixture is completely homogeneous.
- Then add the thinner SP350 Plus to the desired dilution.
- The mixture must be made at a temperature between 15°C (59°F) and 35°C (95°F).
- Sieve the paint through a 120-150 µm (4.7-6 mils) filter.

We recommend use of ratio by weight for mixing.
Every opened can has a limited life. Packaging must be well closed and stored in suitable conditions.

SP350 Primer

	Induction Time	Not Applicable.										
	Initial Spraying Viscosity (20°C/68°F)	With Dilution - Ratio 8V/1V/1V 23 ± 3°C (73 ± 40F) CA 4 ISO 4 15 ± 3s 20 ± 4s										
	Note	Viscosities mentioned above correspond to the recommended range of viscosity to ensure compliant application. The range of dilution can be used to adjust viscosity to the desired level. ISO 4 cup is the reference cup. The others are given for information purposes. 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 (20°C/68°F)	3 hours between 15°C (59°F) and 30°C (86°F) 1 hour between 30°C (86°F) and 35° (95°F)										
	Note	To prevent drying on the surface of the mixed pot, cover it for the duration of the pot life.										
	Dry Film Thickness (DFT)	15 – 35 µm 0.6 – 1.4 mils										
	Wet Film Thickness (WFT)	20 – 50 µm 0.8 – 2 mils										
	Brush Application (Mix Ratio)	<table><tr><th></th><th>Volume</th><th>Weight</th></tr><tr><td>SP350 Base</td><td>8 parts</td><td>100 parts</td></tr><tr><td>SP350 Hardener</td><td>1 part</td><td>11 parts</td></tr></table>		Volume	Weight	SP350 Base	8 parts	100 parts	SP350 Hardener	1 part	11 parts	
	Volume	Weight										
SP350 Base	8 parts	100 parts										
SP350 Hardener	1 part	11 parts										
MIXING PROCEDURE Remove the safety ring and press down on the cap to release the SP350 hardener. Shake the container for approximately 1 min. Remove the cap to be able to apply the SP350 primer with a suitable brush. If the material is not homogenous after 1 min shaking, please use a stick for further mixing (around 1 min) until the material is homogeneous. Do not hermetically close TUKS after mixing base and hardener.												
	Note	Not Applicable.										
	Pot life (20°C/68°F)	3 hours between 15°C (59°F) and 30°C (86°F) 1 hour between 30°C (86°F) and 35° (95°F)										
	Dry Film Thickness (DFT)	15 – 35 µm 0.6 – 1.4 mils										
	Wet Film Thickness (WFT)	20 – 50 µm 0.8 – 2 mils										

SP350 Primer

Application Recommendations

	Conditions	Temperature: 15 – 59 °C 35 – 95 °F
	Conditions	PRIMER SP350 may be applied in conditions outside of the limits shown above. Application must be done carefully to ensure a satisfactory result. Please contact your local AkzoNobel Aerospace Coatings representative to determine the appropriate application techniques when environmental conditions are outside of the recommended range.
	Equipment Recommendation	Gravity compressed air gun - Nozzle 0.8 mm to 1.8 mm.
	Number of Coats	With air spray gun, apply 1 wet coat to achieve 15 µm to 35 µm (0.6 to 1.4 mils) dry thickness. The number of coats depends on the size and the shape of the part on which it is being applied. The recommended dynamic air pressure is 1.5 bar to 4 bar (22 to 58 psi).
	Note	If the thickness is too low: Apply a thin coat to obtain the desired thickness while respecting the recoating time. If the recoating time is exceeded, reactivate with an abrasive pad such as Scotch-Brite type A. If the thickness is too high: See your quality department. For micro-bubbles, runs or fish-eyes (depending on instructions given and type of part): Reactivate the surface using an abrasive paper grade 220 to 320, remove the dust and clean the surface using an approved cleaning solvent, apply a thin coat. In case of big default, non-conformity: Strip the part with an approved paint stripper (only on simple part) or strip by sand blasting (in this case, the surface treatment must be repeated).
	Cleaning of Equipment	Clean equipment with a suitable solvent such as Mapaero D713 or D760. Dispose of waste in accordance with regulations.
	Note	Spray with dry and oil-free air. The use of thinner SP350 Plus is highly recommended.

Physical Properties

	Drying Times	23°C(73°F) ± 2°C/35°F**	40°C (104°F)	60°C (140°F)	80°C (176°F)	InfraRed
	Note	Dry to handle 6 hrs 2-3 hrs 1-1.5 hrs 30-45 mins 25±5 mins Dry to tape 6-7 hrs 2-3 hrs 1.5-2 hrs 45-60 mins 30±10 mins Recoatable N.A.** 1.5-8 hrs 30 mins-2.5 hrs 15-75 mins 10±35 mins Fully Cured 7 days 4 days 3 hrs 1.5 hrs 40±10 mins **SP350 primer must be cured at minimum 40°C (104°F) before applying XS420 Topcoat Drying times have been determined using test plates of a thickness < 2 mm and for 20 µm (0.8 mils) of dry film. Before accelerated drying ≥ 70°C (158°F), leave to flash off for at least 15 minutes at room temperature. The "recoatable" time is determined with XS420 top coat. To recoat SP350 with other waterborne or solvent-based paints, contact us. The qualification test was performed at 23°C (73°F) ± 2°C/35°F for fully cured in 7 days. *N.A. : Not applicable				
	Theoretical Coverage	25 m²/L (1019 sq.ft/gal) for 25 µm (1 mil) dry undiluted. The theoretical consumption value doesn't take into account the transfer efficiency for spray application.				

SP350 Primer

		
	Dry Film Weight	1.4
	Volatile Organic Compounds	285 g/L (2.4 lbs./gal) (ISO11890-1 and ASTM D3960) Base and Hardener undiluted.
	Gloss (60°)	20 – 80 GU
	Note	Gloss levels have been determined using glossmeter with an angle of incidence of 60°.
	Color	Beige
	Flash Point	SP350 Base Between 23 °C (73 °F) and 60 °C (140 °F) SP350 Hardener > 93°C (200 °F) SP350 Plus 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)	SP350 Base 12 months SP350 Hardener 12 months SP350 Plus 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: July 2025 (supersedes August 2022) - 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