VARNISH 1500-HD SLOW

Technical Data Sheet

Product Group

Cabin Coating

Characteristics

Product Information

Three-component, solvent borne, low VOC, very high surface hardness polyurethane varnish, for the passenger cabin interiors. The varnish 1500 HD slow is recommended to be applied on the FRS40 polyurethane topcoat, FRS40 polyurethane metallic topcoat and wood. The slow version allows a better surface aspect, preventing potentially a polishing step.

Components

Base	1500-HD Slow Base
Curing Solution	1500-HD Hardener
Thinner	Thinner P2
Thinner	Thinner P2-2

Specifications

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

Surface Preparation/ Cleaning

1500-HD slow varnish must be applied on a solvent-based topcoat (type FRS40 or metallic FRS40). For applications on composites or corrections of significant surface defects, it is recommended to use a primer such as FRS30 as a primer before using FRS40 polyurethane top coat or FRS40 metallic polyurethane top coat.

All recommendations mentioned above are given for information.

Instruction for Use

Spray Application (Mix Ratio)

	Weight
1500-HD Slow Base	100
1500-HD Hardener	50 parts
Thinner*	15 - 50 parts

* Thinner options: Thinner P2, Thinner P2-2

Ideally, the unmixed products should be stored between 18°C and 25°C (64°F and 77°F) for 24 hours before use.

It is recommended to mix by weight.
- Mix the base and the hardener until the mixing is homogeneous. Then add the thinner.
- Thinner P2 is the preferred thinner to be used.
- Thinner P2-2 can be used in case of high temperature and humidity condition to avoid solvent popping during drying.

Remark : It is recommended to sieve the material with a 90-125µm (3.5-5 mils) filter before application

P2-2 is designed to ensure compliant application and aspect under extreme condition of temperature and relative hygrometry.

Induction Time

Not Applicable.

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VARNISH 1500-HD SLOW

Initial Spraying Viscosity (23°C/73°F)	30 – 40 seconds ISO Cup #4 17 – 23 seconds AFNOR Cup #4 18 – 24 seconds Ford Cup #4 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. ISO 4 cup is the reference cup. The others are given for information purposes
Pot life (23ºC/73ºF)	For a 30% dilution : 2 hours A lower dilution will significantly reduce the pot life.
Dry Film Thickness (DFT)	20 – 100 µm 0.8 – 3.9 mils
Wet Film Thickness (WFT)	40 – 200 µm 1.6 – 7.9 mils

Application Recommendations

Conditions

Temperature:	15 – 35 °C 59 – 95 °F
Relative Humidity:	30 – 80 %

Note

1500-HD Slow 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

Spray gun type	Product supply	Fluid Pressure	Nozzle orifice	Product flow	Dynamic air pressure at gun-inlet *
Conventional	NA	NA	1.2-1.8mm	NA	1.5-3 bars[1]

[1]Dynamic Air Pressure at gun-inlet measured with an open trigger.

Number of Coats

Follow the above recommendations and apply the product in crossed coats, dynamic pressure of 2.5-3 bars (35-40 psi), in order to obtain the desired thickness (about 2 crossed coats for 60 µm dry / 2.4 mils).

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Cleaning of Equipment

Clean the equipment with a suitable solvent, such as P2 or P2-2 from AkzoNobel. Cetonic solvent can be used as well

Note

The quality of the application of all coatings will be influenced by the spray equipment chosen and the temperature, humidity, and airflow of the paint application area. When applying the product for the first time, it is recommended to prepare test panels to optimize equipment settings to obtain the best coating appearance possible.

Physical Properties

Drying Times

	23°C/73°F, 55% RH	40°C/104°F	60°C/140°F
Dust Free	30 mins	N.A.	N.A.
Dry to Handle	>28 hours	5 hours	4 hours
Dry to Polish	12 hours	6 hours	N.A.

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	23°C/73°F, 55% RH	40°C/104°F	60°C/140°F
Dry to Mask	>18 hours	16 hours	N.A.

Note

Substrate surface temperature

Drying times have been determined using test pieces of a thickness <2mm and for 40 µm 1,6 mils) of dry film. Either thinners give the same drying times.

Before forced-curing, it is recommended to let the 1500-HD slow Varnish to dry 1 hour at 23°C (73°F) for solvent evaporation.
Coating curing depends on temperature, relative humidity and airflow.
Increased temperatures, low RH and efficient airflow can decrease the drying times significantly.

Theoretical Coverage

Base and Hardener undiluted.
9 m²/kg at 50µm (2 mils).

Dry Film Weight

1.13

Volatile Organic Compounds

For 30% dilution
530 g/L (4.42 lbs/gal).

Gloss

> 90 GU at 60°

Color

Not Applicable.

Flash Point

1500-HD Slow Base	30 °C / 86°F
1500-HD Hardener	30 °C / 86°F
Thinner P2	32 °C / 89.6°F
Thinner P2-2	41 °C / 105.8°F

Storage

Store the product dry and at a temperature between 5 – 35 ºC / 41 – 95 ºF per AkzoNobel Aerospace Coatings specification. Store in the original unopened containers. Refer to container label for specific storage life information.

Shelf life 5 - 35°C (41 - 95°F)

1500-HD Slow Base	24 months
1500-HD Hardener	24 months
Thinner P2	48 months
Thinner P2-2	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: May 2025 (supersedes none) - 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

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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

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