HS Base Coat

Technical Data Sheet: 450-31
H-series

1. Introduction

ALEXSEAL HS Base Coat is a fast-drying high-solid (HS) two component polyurethane base coat with excellent hiding power, especially designed for efficient applications. Used in combination with an ALEXSEAL Clear Coat, the material shows excellent chemical and mechanical resistance and is extremely glossy and color stable.

This system needs to be applied in 3 steps. Application by spray only.

Step 1: Apply 1 – 2 coats ALEXSEAL HS Base Coat (depending on the color) by spray application to a wet film thickness (WFT) of 40 - 60 microns (1.6 – 3.2 mils) per coat. This will achieve a dry film thickness (DFT) of 20 - 30 microns (0.8 – 1.2 mils) for a 1 coat application. Multiple coats may be required to achieve full hide with some colors. A flash-off time / drying period of 30 minutes at 20°C (68°F) is required. The maximum recommended film thickness during a spray application is totalling 120 microns (4.7 mils) WFT, or 75 microns (3.0 mils) DFT.

NOTE

If you want to apply ALEXSEAL Topcoat 501 Clear Coat on top of the HS Base Coat, make sure to use the R5541 ALEXSEAL HS Base Activator Medium (NOT R5521 Slow) during the application of the HS Base Coat.

Step 2: After the HS Base Coat has dried a minimum of 2 hours at 25°C (68°F), longer times for lower temperatures, see chart on page 4, up to a maximum of 5 days, apply 2-3 coats of ALEXSEAL Topcoat Clear in order to seal the HS Base Coat. The maximum re-coating time of the ALEXSEAL HS Base Coat should not be exceeded. In case of exceeding, sand the surface with fine grade and clean the surface with ALEXSEAL Wipe Down Solvent A9049. Note: Remove tape which has been overcoated with Clear Coat as soon as possible, for example after 2 hours.

Step 3: To achieve a higher level of gloss and a more durable finish, apply a second application of ALEXSEAL Clear Coat. Graphics may be added between Step 2 and 3. Note: it is important not to break through clear when sanding, this can affect or change the color of the HS base coat.

2. Range of application

ALEXSEAL HS Base Coat / Clear Coat system can be used internally or externally on areas of the yacht which are not subject to permanent water immersion.

3. Color

ALEXSEAL HS Base Coat is available in standard factory packaged colors. Refer to the color card or product overview for part numbers.

4. Coverage

Volume Solids catalyzed without reduction: 55 - 70% depending on color
Note: Coverage rates for ALEXSEAL HS Base Coat are figured for base and converter. Activator is added as percent of total quantity of base & converter.

	m² / liter	**m² / gal**	**sq. ft. / gal**	**@ DFT in µm (mils)**
Theoretical	11	42	462	50 (2)
Practical				
Conventional Air Spray Equipment	5.5	20.8	224	50 (2)
HVLP Air Spray Equipment	6.8	26	280	50 (2)

5. Substrate pre-treatment

The substrate must be clean, dry and free from dust, grease, oil, and other contamination. To achieve optimum performance and adhesion ALEXSEAL Finish Primer 442 must be used. Final sanding of ALEXSEAL Finish Primer 442 should be carried out with 280, 320 or 400 grit sand paper to a smooth finish.
It is recommended that the ALEXSEAL HS Base Coat should be applied over the sanded primer within 4 days, 2 days if outside to ensure adhesion.

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6. Trade names & Packaging

Hxxxx	ALEXSEAL HS Base Coat	0,75 Gal
C5047	ALEXSEAL HS Base Coat Converter	1 QT
R5541	ALEXSEAL HS Base Activator Medium	1 QT
R5521	ALEXSEAL HS Base Activator Slow	1 QT

7. Mixing ratio

3 part by volume	Hxxxx	ALEXSEAL HS Base Coat
1 part by volume	C5047	ALEXSEAL HS Base Coat Converter
1 part by volume	Rxxxx	ALEXSEAL HS Base Activator (choose from list above)

Example: 3:1:1

The amount of ALEXSEAL HS Activator (activated reducer) is fixed and cannot be changed. Mixed material must be filtered with a decent sized paint filter before application.

8. Application

Viscosity	Zahn #2 Signature≈15 - 19 sec, DIN 4 cup 4mm≈13 - 15 sec, ISO 3≈70-80 sec
Nozzle Size Gravity Gun	1.0 to 1.3 mm (0.040 to 0.051 inch) - Conventional & HVLP
Nozzle Size Siphon Cup	1.0 to 1.3 mm (0.040 to 0.051 inch) - Conventional & HVLP
Fluid Nozzle Size Pressure Pot	0.8 to 1.0 mm (0.032 to 0.040 inch) - Conventional & HVLP
Atomizing Pressure	2.5 to 4.0 bar (40 to 60 PSI) - Conventional & HVLP
Pot Pressure	0.5 to 1.2 bar (7 to 16 PSI) - Conventional & HVLP

Repair Areas

For sport repair and spare parts stick to the overcoating interval of the original application to avoid color differences. Avoid straight edges, work with fading technique.

Multi Color Scheme:

ALEXSEAL HS Base Coat is the best materials for realizing multi color schemes on a yacht because the base coat is fast drying, tape dry already after 4 hours. For masking the different areas use high quality tape, e.g. 3M Scotch Performance Coloured PVC Film Tape 6893 19x66 mm. After applying the different colors, overcoat the whole surface with Clear Coat.

9. Pot life and Drying Optimal application environment range - min. 15°C (60°F) 40% RH, up to max. 30°C (85°F) 80% RH

Temperature for minimum drying time	15°C (60°F)	20°C (68°F)	25°C (77°F)	30°C (85°F)	Max Dry Time
Pot Life - approx.	3 hrs	2.5 hrs	2 hrs	1,5 hrs	N/A
Dust Free	90 min	60 min	45 min	30 min	N/A
Tape Dry	5 hrs	4 hrs	3 hrs	2 hrs	N/A
Fully Cured	10 days	7 days	7 days	7 days	N/A
Recoat after tack up with additional coats of ALEXSEAL HS Base Coat	45 min	30 min	30 min	15 min	5 days
Overcoat with ALEXSEAL Clear Coat	4 hrs	3 hrs	2 hrs	2 hrs	3 days

Note: The above chart reflects approximate minimum and maximum time. Surface temperature, air flow, direct or non-direct sunlight, quantity and/or choice of reducer, and film thickness will affect actual tack up, recoat, overcoat, and drying times during application. During the drying phase the minimum temperature is 15°C (60°F). Ideal temperature: 25°C (77°F). The minimum application condition should be 3°C (5.4°F) above dew point.

Professional Use Only

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