

Premium Topcoat 501

Technical Data Sheet:
450-10 / T series

- 1. Introduction** ALEXSEAL® Premium Topcoat 501 is a two component, polyurethane-based coating, designed for exterior and interior applications. ALEXSEAL® Premium Topcoat 501 has a high gloss wet look which provides superior distinction of image. This product has been specifically developed for the yacht industry.
The product's special characteristics ensure a reduction of cleaning and maintenance, while at the same time preserving the yacht's appearance and value. After curing, ALEXSEAL® Premium Topcoat 501 offers excellent gloss and color stability values, even under extreme climatic conditions. Additionally the material is highly resistant to UV rays, salt water, abrasion and fuel.
- 2. Range of application** ALEXSEAL® Premium Topcoat 501 is used as a high-gloss topcoat in spray or brush applications. It can be used internally or externally in areas not subject to permanent water immersion.
- 3. Color** ALEXSEAL® Premium Topcoat 501 is available in standard factory packaged colors and, upon request, in custom colors. Refer to the color card or price list for part numbers.
- 4. Coverage** Coverage for ALEXSEAL® Premium Topcoat 501 when applying 2 - 3 coats or passes in the same application period.
Volume Solids catalyzed without reduction: whites 42 %, colors 38 %.
- Theoretical:** 6 m² / l (244 sq. ft. per gallon) at recommended dry film thickness of 50 - 100 microns (2 - 4 mils).
- Practical:** **Conventional Air Spray Equipment:** 3.6 m² / l (146 sq. ft. per gallon) at recommended dry film thickness of 50 - 100 microns (2 - 4 mils).
HVLP Air Spray Equipment: 4.5 m² / l (183 sq. ft. per gallon) at recommended dry film thickness of 50 - 100 microns (2 - 4 mils).
Brush / Roller and Airless Spray Equipment: 6 m² / l (244 sq. ft. per gallon) at recommended dry film thickness of 50 - 100 microns (2 - 4 mils).
- 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 or Finishing Primer 401 must be used. Final sanding of ALEXSEAL® Finish Primer 442 or Finishing Primer 401 should be smooth sanded with 320 - 400 grit sand paper.
- 6. Trade names**
- | | | |
|---------------------------|-------|--|
| Base Material | T.... | ALEXSEAL® Premium Topcoat 501 (Base Color) |
| Converter Spray | C5051 | ALEXSEAL® Topcoat Converter Spray |
| Converter Brush | C5012 | ALEXSEAL® Topcoat Converter Brush |
| Reducer Superfast (spray) | R5090 | ALEXSEAL® Topcoat Reducer Superfast |
| Reducer Fast (spray) | R5070 | ALEXSEAL® Topcoat Reducer Fast |
| Reducer Med (spray) | R5050 | ALEXSEAL® Topcoat Reducer Medium |
| Reducer Slow (spray) | R5030 | ALEXSEAL® Topcoat Reducer Slow |
| Reducer Brush | R5015 | ALEXSEAL® Topcoat Reducer Brush |
| Accelerator | A5035 | ALEXSEAL® Topcoat 501 Accelerator |
- 7. Mixing ratio**
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|--------|-------------------------------------|-------|--|
| Spray: | 1 part by volume | T.... | ALEXSEAL® Premium Topcoat 501 (Base Color) |
| | 1 part by volume | C5051 | ALEXSEAL® Topcoat Converter Spray |
| | 30 to 35 % by volume | | ALEXSEAL® Topcoat Reducer (choose from list above) |
| | Example: 1 : 1 : ¾ = 35 % reduction | | |
- T0125 Clear Gloss must be reduced 40 to 45 % by volume.
Example: 1 : 1 : 9/10 = 45 % reduction
- | | | | |
|--------------------|---|-------|--|
| Brush and Rolling: | 2 parts by volume | T.... | ALEXSEAL® Premium Topcoat 501 (Base Color) |
| | 1 part by volume | C5012 | ALEXSEAL® Topcoat Converter Brush |
| | 16 to 33 % by volume | R5015 | ALEXSEAL® Topcoat Reducer Brush |
| | Example: 2 : 1 : ½ up to ¾ = 16 to 25 % reduction | | |

Professional Use Only

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- 8. Application**
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|-------------------------------------|--------------------------------|
| Viscosity (Zahn #2) | approx. 15 to 18 sec |
| Siphon Fluid Nozzle Size | 1.7 mm (0.070) |
| Pressure Pot Feed Fluid Nozzle Size | 1.0 to 1.3 mm (0.040 to 0.050) |
| Atomizing Pressure | 3.0 to 5.0 bar (42 to 70 PSI) |
| Pot Pressure | 0.7 to 1.5 bar (10 to 20 PSI) |
- Application by Spraying: Apply 2 to 3 coats to a wet film thickness (WFT) of 50 - 75 microns (2 - 3 mils) per coat. Allow 20 - 60 minutes flash time between coats. This will achieve a dry film thickness (DFT) of 50 - 75 microns (2 - 3 mils) for a 2 coat application. For a 3 coat application, this will achieve a dry film thickness (DFT) of 75 - 112 microns (2 - 4.5 mils). Maximum recommended film thickness during a spray application is 3 coats totalling 225 microns (9 mils) WFT, or 112 microns (4.5 mils) DFT.
- Application by brush/rolling: Apply 2 to 3 coats to a wet film thickness (WFT) of 50 - 75 microns (2 - 3 mils) per coat. Each coat should dry to a tape dry stage, 12 - 24 hrs. Sand with 320 - 400 between coats. This will achieve a dry film thickness (DFT) of 50 - 75 microns (2 - 3 mils) for a 2 coat application. For a 3 coat application, this will achieve a dry film thickness (DFT) of 50 - 112 microns (2 - 4.5 mils).
- Accelerator: A5035 ALEXSEAL® Topcoat 501 Accelerator is used to reduce the drying time of ALEXSEAL® Premium Topcoat 501. Per each mixed (catalyzed and reduced) 2 quarts of ALEXSEAL® Premium Topcoat 501, a maximum of 1 cap or 10 ml (1 / 3 ounce) of A5035 ALEXSEAL® Topcoat 501 Accelerator may be added. Additional quantities of accelerator reduce pot life, and are not recommended.

9. Pot life and Drying

Temperature for minimum recoat time	15°C (60°F)	20°C (68°F)	25°C (77°F)	30°C (85°F)	Max Dry Time
Pot Life - approx.	8 hrs	8 hrs	6 hrs	4 hrs	8 hrs
Pot Life - with A5035 ALEXSEAL® Topcoat 501 Accelerator	4 hrs	3 hrs	3 hrs	2 hrs	4 hrs
Dust Free	90 min	60 min	45 min	30 min	N/A
Tape Dry - without accelerator	36 hrs	30 hrs	24 hrs	18 hrs	N/A
Tape Dry - with A5035 ALEXSEAL® Topcoat 501 Accelerator	30 hrs	24 hrs	18 hrs	12 hrs	N/A
Fully Cured - without accelerator	21 days	18 days	14 days	10 days	N/A
Recoat after tack up with additional coats of ALEXSEAL® Premium Topcoat 501	90 min	60 min	45 min	30 min	16 hrs
Overcoat with another product. Preparation including sanding is required	24 hrs	24 hrs	18 hrs	12 hrs	N/A

Note: The above chart reflects approximate minimum and maximum time. Surface temperature, air flow, direct or non-direct sunlight, choice of reducer speed, and film thickness will effect actual times during application.

Drying parameters may be adjusted by use of A5035 ALEXSEAL® Topcoat 501 Accelerator and choice of ALEXSEAL® Topcoat Reducer. Minimum temperature during drying phase: 15°C (60°F). Ideal temperature: 25°C (77°F).

10. Packaging	T....	ALEXSEAL® Premium Topcoat 501 (Base Color)	1 QT & 1 Gal
	C5051	ALEXSEAL® Topcoat Converter Spray	1 QT & 1 Gal
	C5012	ALEXSEAL® Topcoat Converter Brush	1 Pt & ½ Gal
	R5090	ALEXSEAL® Topcoat Reducer Superfast	1 QT & 1 Gal
	R5070	ALEXSEAL® Topcoat Reducer Fast	1 QT & 1 Gal
	R5050	ALEXSEAL® Topcoat Reducer Medium	1 QT & 1 Gal
	R5030	ALEXSEAL® Topcoat Reducer Slow	1 QT & 1 Gal
	R5015	ALEXSEAL® Topcoat Reducer Brush	1 QT & 1 Gal
	A5035	ALEXSEAL® Topcoat 501 Accelerator	4 Ounces

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