

Finish Primer 442

Technical Data Sheet: 153-40
P4420 / P4423

1. Introduction

ALEXSEAL Finish Primer 442 is an epoxy-based finish primer offering advanced adhesion qualities over various substrates, exceptional sanding characteristics, mechanical resistances and good film build.

2. Range of application

ALEXSEAL Finish Primer 442 is designed to prime and seal old and new, properly prepared, stable surfaces such as gelcoat and fiberglass, as well as to seal other Alexseal primers and filler systems. Using this primer as a base enhances the "Wet Look" of ALEXSEAL's Topcoats. Finish Primer 442 may be used above and below the waterline.

3. Color

Colors of mixture: White / Gray
 Base material: White / Gray
 Converter: Clear

4. Coverage

Volume Solids catalyzed without reduction: 39 %.

Note: Coverage rates are figured for base and converter. Reducer is added as percent of total quantity of base & converter.

	m ² / liter	m ² / gal	sq. ft. / gal	Rec. DFT in µm (mils)
Theoretical	6.2	23.5	253	75 - 100 (3 - 4)
Practical				
Conventional Air Spray Equipment	2.9	11.2	120	75 - 100 (3 - 4)
HVLP Air Spray Equipment	3.3	12.5	134	75 - 100 (3 - 4)
Brush / Roller	5.5	20.9	225	75 - 100 (3 - 4)

5. Substrate pre-treatment

The substrate must be clean, dry and free from dust, grease, oil and other contamination. Fiberglass and gel coat should be coated directly with ALEXSEAL Finish Primer 442 after sanding with P100 - P150 grit.
 Refit and repair: Old coatings must have good adhesion and chemical resistance and must be sanded with P100 - P150 grit. A compatibility test should be performed if the old coating is questionable.
 Steel and Aluminum should initially be coated with ALEXSEAL Protective Primer 161.
 Fairing Systems: ALEXSEAL Finish Primer 442 should be applied over ALEXSEAL Super Build 302 after block sanding with P100 - P180 grit.

6. Trade names

Base Material	P4420	ALEXSEAL Finish Primer 442 White
	P4423	ALEXSEAL Finish Primer 442 Gray
Converter	C4427	ALEXSEAL Finish Primer 442 Converter
Reducer	R4042	ALEXSEAL Epoxy Primer Reducer
	R5015	ALEXSEAL Topcoat Reducer Brush
Accelerator	A4429	ALEXSEAL Accelerator Finish Primer 442

7. Mixing ratio

1 part by volume	P.....	ALEXSEAL Finish Primer 442 Base
1 part by volume	C4427	ALEXSEAL Finish Primer 442 Converter
15 to 25 % reduction (vol.)	R4042	ALEXSEAL Epoxy Primer Reducer

Example: 1 : 1 : 1/2 = 25 % reduction for spray application

The amount of reducer required may vary depending on the application conditions.
 NOTE: Slower reducer is recommended for temperatures above 20°C.
 442 may be reduced up to 25% for thin smooth applications such as use as a sealer where surfacing build is not as necessary.
 Due to its physical properties, the converter sometimes tends to form tiny crystals. This crystallization is a natural process, not a sign of adulteration or spoilage and will not lead to any negative quality impact.

8. Application

Viscosity	Zahn #2: ≈ 25 sec, DIN 4 cup 4mm: ≈ 21 sec
Nozzle Size Gravity Gun	1.4 to 1.8 mm (0.055 to 0.071) - Conventional & HVLP
Nozzle Size Siphon Cup	1.6 mm (0.060) - Conventional & HVLP
Fluid Nozzle Size Pressure Pot	1.2 to 1.6 mm (0.046 to 0.060) - Conventional & HVLP

Professional Use Only

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Atomizing Pressure 2.0 to 4.0 bar (30 to 60 PSI) - Conventional & HVLP
 Pot Pressure 0.7 to 1.5 bar (10 to 22 PSI) - Conventional & HVLP

Spray & Brush Apply 2 or 3 coats to a wet film thickness (WFT) of 100 - 200 microns (4 - 8 mils) per coat. This will achieve a dry film thickness (DFT) of 50 (2 mils) for a 2 coat application. Maximum recommended film thickness during a spray application is 3 coats totaling 300 microns (12 mils) WFT, or 100 microns (4 mils) DFT.

NOTE: Dry spray can be caused by poor atomization of the paint, spray gun held too far from the surface, high air temperature, thinner evaporating too fast or coating applied in windy conditions. Sand down to a rough even surface and re-coat. Pinholes can be caused by entrapped solvents in the film or by incorrect application technique which can lead to defects in the final topcoat surface.

Accelerator A4429 ALEXSEAL Accelerator for Finish Primer 442 is used to reduce the drying time of ALEXSEAL Finish Primer 442. Additional quantities of A4429 ALEXSEAL Accelerator for Finish Primer 442 reduce pot life, and are not recommended. When using ALEXSEAL Finish Primer 442 directly on metal, the use of A4429 ALEXSEAL Accelerator Finish Primer 442 is not recommended. Add up to 12.5% of A4429 to the catalyzed 442 epoxy primer, or 1 pint A4429 for each mixed gallon of base and converter. A4429 also replaces that amount of the reducer. Mixing to achieve 12.5% reduction using A4429 is 2 quarts base, 2 quarts converter, 1 pint A4429. Example 1:1:1/4. Mixing for 25% overall reduction using this accelerator will require 12.5% reduction using A4429 and 12.5% reduction using R4042 Epoxy Primer Reducer. Example 1:1: 1/4: 1/4.

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 recoat time	15°C (60°F)	20°C (68°F)	25°C (77°F)	30°C (85°F)	Max Dry Time
Pot Life - approx.	12 hrs	12 hrs	12 hrs	12 hrs	N/A
Pot Life - with A4429 ALEXSEAL Accelerator for Finish Primer 442	6 hrs	6 hrs	6 hrs	6 hrs	N/A
Dust Free	90 min	60 min	45 min	30 min	N/A
Tape Dry - without accelerator	30 hrs	24 hrs	18 hrs	14 hrs	N/A
Tape Dry - with A4429 ALEXSEAL Accelerator for Finish Primer 442	24 hrs	18 hrs	14 hrs	12 hrs	N/A
Fully Cured - without accelerator	11 days	9 days	7 days	5 days	N/A
Recoat with another coat of ALEXSEAL Finish Primer 442	3 hrs minimum	2 hrs minimum	1 hr minimum	1 hr minimum	24 hrs maximum
Overcoat with another product including Fairing Compounds, 302, 303, 328. Sanding is required after maximum time and before topcoating.	12 hrs minimum	12 hrs Minimum	12 hrs minimum	12 hrs minimum	24 hrs maximum

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.

10. Packaging	P4420	ALEXSEAL Finish Primer 442 White	1 QT & 1 Gal
	P4423	ALEXSEAL Finish Primer 442 Gray	1 QT & 1 Gal
	C4427	ALEXSEAL Finish Primer 442 Converter	1 QT & 1 Gal
	R4042	ALEXSEAL Epoxy Primer Reducer	1 QT & 1 Gal
	A4429	ALEXSEAL Accelerator Finish Primer 442	1 PT

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