

# Protective Primer 161

Technical Data Sheet: 153-60  
**P1610**

## 1. Introduction

ALEXSEAL® Protective Primer 161 is an epoxy based primer. Due to specific corrosion inhibitors and a combination of epoxy resin binding agents, this primer offers excellent adhesion promotion on all substrates as well as corrosion protection on steel and aluminium substrates. The long re-coating times of ALEXSEAL® Protective Primer 161 allows an economical application process. After curing, ALEXSEAL® Protective Primer 161 is the ideal adhesion promoter for additional layers of ALEXSEAL® products.

## 2. Range of application

ALEXSEAL® Protective Primer 161 is used for corrosion protection and adhesion promotion on steel and aluminium substrates, both above and below the waterline.

## 3. Color

Color of mixture: White  
Base Material: White  
Converter: Clear

## 4. Coverage

Volume Solids catalyzed without reduction: 48 %

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

	m <sup>2</sup> / liter	m <sup>2</sup> / gal	sq. ft. / gal	Rec. DFT in µm (mils)
<b>Theoretical</b>	4,8	18	196	100 ( 4 )
<b>Practical</b>				
Conventional Air Spray Equipment	2.4	9.2	100	100 ( 4 )
HVLP Air Spray Equipment	2.6	10.2	110	100 ( 4 )
Airless Equipment	2.9	11.2	120	100 (4)
Brush / Roller	3.5	13.2	142	100 (4)

## 5. Substrate pre-treatment

The substrate must be clean, dry and free from dust, grease, oil and other contamination.

ALEXSEAL® Protective Primer 161 is applied directly to the properly cleaned and prepared substrate (ideally within 6 hours). To achieve optimum adhesion and performance:

**Steel** should be prepared by sandblasting to a minimum of near white metal, SA 2.5 (SSPC – SP10 - 85) or ground (36 to 40 grit) to a 50 - 100 micron (2 - 4 mils) profile.

*Note: White metal Sa 3 (SSPC-SP5-85 is preferred.*

**Aluminium** should be sandblasted or ground (36 to 60 grit) to bright clean aluminium with a 50 - 100 micron (2 - 4 mils) profile.

ALEXSEAL® Protective Primer 161 may be applied as a tie coat primer before a fairing application over gel coat and raw resin lay-up. Gel coat must be sanded with 80 - 100 grit. Fiberglass resin should be ground with 36 - 60 and / or sand blasted. The surface and the bottom of any profile should be dull and abraded with no shiny spots.

## 6. Trade names

Base Material P1610 ALEXSEAL® Protective Primer 161 White  
Converter C1617 ALEXSEAL® Protective Primer 161 Converter  
Reducer R4042 ALEXSEAL® Epoxy Primer Reducer

## 7. Mixing ratio

6 parts by volume P1610 ALEXSEAL® Protective Primer 161 Base  
1 part by volume C1617 ALEXSEAL® Protective Primer 161 Converter  
5 - 10% reduction (vol.)\* R4042 ALEXSEAL® Epoxy Primer Reducer

Example: 6 : 1 : 1/2 = 7 % reduction

\*The amount of reducer required may vary depending on the application conditions. For special application reduction can be added up to 25%.

**Professional Use Only**

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<b>8. Application</b>	Viscosity	Zahn #2: ≈ 80 sec, DIN 4 cup 4mm: ≈ 70 sec
	Nozzle Size Gravity Gun	1.8 – 2.5 mm (0.071 to 0.098) - Conventional & HVLP
	Nozzle Size Siphon Cup	1.6 mm (0.60) - Conventional & HVLP
	Fluid Nozzle Size Pressure Pot	1.4 to 1.6 mm (0.055 to 0.063) - Conventional & HVLP
	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
	Airless Equipment	Tip 0.35mm / 60° to 0.43mm / 60° (0.014 / 60° to 0.017 / 60°) Inlet Pressure 2 to 3 bar (29 to 44 PSI)

Application by Spraying      Apply 1 cross coat or 2 coats to a total wet film thickness (WFT) of 200 - 300 microns (8 - 12 mils). This will achieve a dry film thickness (DFT) of 90 - 135 microns (3 - 5 mils).

**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.	8 hrs	8 hrs	6 hrs	4 hrs	N/A
Dust Free	40 min	30 min	20 min	10 min	N/A
Fully Cured	30 hrs	24 hrs	20 hrs	16 hrs	N/A
Recoating with another coat of ALEXSEAL® Protective Primer 161. Sanding is required after the maximum time.	6 hrs minimum	4 hrs minimum	2 hrs minimum	2 hrs minimum	6 months maximum
Overcoat with other products including 202, 302, 303, 328, 357, 442 and 501. Preparation including sanding is required after maximum time.	32 hrs minimum	16 hrs minimum	16 hrs minimum	12 hrs minimum	6 months 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 effect 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.

<b>10. Packaging</b>	P1610	ALEXSEAL® Protective Primer 161 White	1 Gal & 5 Gal
	C1617	ALEXSEAL® Protective Primer 161 Converter	0.167 Gal (Conv. for 1 Gal)
	C1617	ALEXSEAL® Protective Primer 161 Converter	0.833 Gal (Conv. for 5 Gal)
	R4042	ALEXSEAL® Epoxy Primer Reducer	1 QT & 1 Gal

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