Protective Primer 161

Technical Data Sheet: 153-60

P1610 / P1613 / P1615

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 / Gray / Yellow
Base Material:	White / Gray / Yellow
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.

	m² / liter	m² / gal	sq. ft. / gal	Rec. DFT in µm (mils)
Theoretical	4,8	18	196	100 (4)
Practical				
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 near white metal, SA 2.5 (SSPC – SP10 - 85) or ground (36 to 40 grit) to a 50 - 100 micron (2 - 4 mils) profile.

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
	P1613	ALEXSEAL® Protective Primer 161 Gray
	P1615	ALEXSEAL® Protective Primer 161 Yellow
Converter	C1617	ALEXSEAL® Protective Primer 161 Converter
Reducer	R4042	ALEXSEAL® Epoxy Primer Reducer

7. Mixing ratio

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

Allow a 15 minute induction period after mixing base and converter, add reducer and remix.
Example: 6 : 1 : $^1/_2$ = 7 % reduction
The amount of reducer required may vary depending on the application conditions.

Professional Use Only

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8. Application

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.					

10. Packaging

P1610	ALEXSEAL® Protective Primer 161 White	1 Gal & 5 Gal
P1610	ALEXSEAL® Protective Primer 161 Gray	1 Gal & 5 Gal
P1615	ALEXSEAL® Protective Primer 161 Yellow	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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