

Protective Primer 101

Technical Data Sheet:
153-10 / P1095

1. Introduction

ALEXSEAL® Protective Primer 101 is a two component primer based on epoxy resins. Due to specific corrosion inhibitors and a well chosen 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 101 allows an economical application process. After curing, ALEXSEAL® Protective Primer 101 is the ideal adhesion promoter for additional layers of ALEXSEAL® products.

2. Range of application

ALEXSEAL® Protective Primer 101 is used for corrosion protection and adhesion promotion on steel and aluminium substrates, both above and below the waterline.

3. Color

Color of mixture: Sand
Base material: White
Converter: Cream

4. Coverage

Coverage for ALEXSEAL® Protective Primer 101 when applying 1 - 2 coats or passes in the same application period.

Volume Solids catalyzed without reduction: 56 %

Theoretical:

5 m² / l (204 sq. ft. per gallon) at recommended dry film thickness of 75 - 100 microns (3 - 4 mils).

Practical:

Conventional Air Spray Equipment: 3 m² / l (122 sq. ft. per gallon) at recommended dry film thickness of 75 - 100 microns (3 - 4 mils).

HVLP Air Spray Equipment: 3.8 m² / l (153 sq. ft. per gallon) at recommended dry film thickness of 75 - 100 microns (3 - 4 mils).

Brush / Roller and Airless Spray Equipment: 5 m² / l (204 sq. ft. per gallon) at recommended dry film thickness of 75 - 100 microns (3 - 4 mils).

5. Substrate pre-treatment

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

ALEXSEAL® Protective Primer 101 is applied directly to the properly cleaned and prepared substrate.

To achieve optimum adhesion and performance:

Steel should be prepared by sandblasting to white metal (SSPC - SP5 - 85) or ground (36 to 60 grit) to a 75 - 100 micron (3 - 4 mils) profile.

Aluminium should be sandblasted or ground (36 to 60 grit) to bright clean aluminium with a 75 - 100 micron (3 - 4 mils) profile.

ALEXSEAL® Protective Primer 101 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 - 150 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	P1095	ALEXSEAL® Protective Primer 101
Converter	C1016	ALEXSEAL® Protective Primer 101 Converter
Reducer	R4042	ALEXSEAL® Epoxy Primer Reducer

7. Mixing ratio

9 parts by volume	P1095	ALEXSEAL® Protective Primer 101
1 part by volume	C1016	ALEXSEAL® Protective Primer 101 Converter
10 % reduction (vol.)	R4042	ALEXSEAL® Epoxy Primer Reducer

Allow a 15 minute induction period after mixing base and converter, add reducer and remix.
Example: 9 : 1 : 1 = 10 % reduction

Professional Use Only

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8. Application

Viscosity (Zahn #2)	approx. 45 sec
Fluid Nozzle Size	1.4 to 1.6 mm (0.55 to 0.06) - Conventional & HVLP
Atomizing Pressure	3.0 to 5.0 bar (42 to 70 PSI) - Conventional & HVLP
Pot Pressure	0.7 to 1.5 bar (10 to 20 PSI) - Conventional & HVLP
Airless Equipment	Tip 0.35 - 60 to 0.43 - 60 mm (0.014 - 60 to 0.017 - 60)
Airless Equipment	Pressure 3.0 to 5.0 bar (42 to 70 PSI)

Apply 1 - 2 coats to a total wet film thickness (WFT) of 150 - 175 microns (6 - 7 mils). This will achieve a dry film thickness (DFT) of 75 - 100 microns (3 - 4 mils) for an application, using 10 % reduction. Minimum recommended film thickness is 75 microns (3 mils) DFT. Maximum recommended film thickness during a spray application is 2 coats totalling 175 microns (7 mils) WFT, or 100 microns (4 mils) DFT.

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	N/A
Dust Free	90 min	60 min	45 min	30 min	N/A
Tape Dry	30 hrs	24 hrs	20 hrs	16 hrs	N/A
Fully Cured	48 hrs	36 hrs	24 hrs	24 hrs	N/A
Recoating with another coat of Alexseal® Protective Primer 101. Sanding is required after the maximum time.	6 hrs minimum	4 hrs minimum	2 hrs minimum	2 hrs minimum	8 weeks maximum
Overcoat with other products including 202, 302, 442, 401 and 501. Preparation including sanding is required after maximum time.	24 hrs minimum	12 hrs minimum	6 hrs minimum	6 hrs minimum	8 weeks maximum

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

10. Packaging

P1095	ALEXSEAL® Protective Primer 101	1 Gal
C1016	ALEXSEAL® Protective Primer 101 Converter	0.1 Gal
R4042	ALEXSEAL® Epoxy Primer Reducer	1 QT & 1 Gal

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