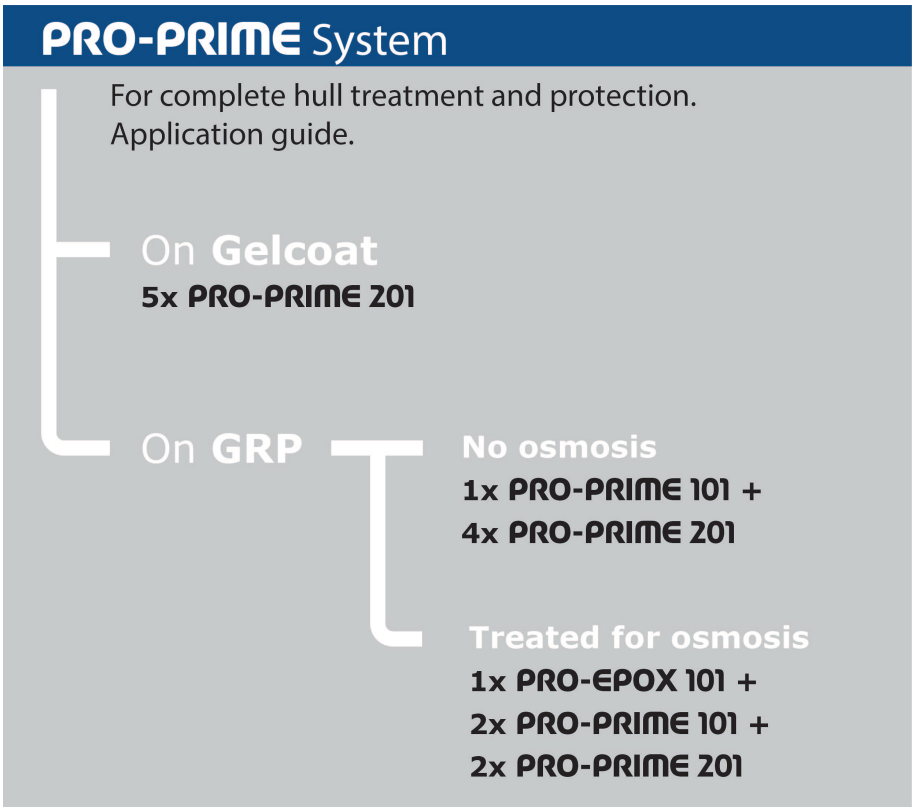
PRO-PRIME 201

OSMOSIS PROTECTION EPOXY PRIMER

TECHNICAL DATA SHEET

PRO-PRIME 201 is a fast, versatile osmosis protection epoxy primer for GRP / FRP hulls, above and below the waterline, bilges, decks and superstructures. For carbon fiber hulls, parts and structures.

PRO-PRIME 201 can be used on its own or as part of the PRO-PRIME System as outlined below.



Application method

Suitable for brush/roller or spray application.

Features

- 2:1 by volume,
- very strong adhesion,
- fast drying, multiple layers can be applied per day,
- available in light blue and light green, for color alternation, and white,
- easily faired,

- curing will continue even if ambient conditions become unfavorable.

Product data

PRO-PRIME 201: Properties	
Mix ratio, by volume	2:1
Mix ratio, by weight	3:1
Volume solids, % *of mixture, undiluted, approx.*	70
V.O.C., g/lt *of mixture, undiluted, approx.*	297
Specific weight, kg/lt *of mixture, undiluted, approx., ISO 2811*	1.41
Induction time, mins.	5
Shelf life (in controlled environment), years	2
Packaging, comp. A+B, lt	2, 30

Curing speed

PRO-PRIME 201: Curing speed			
	10 °C	20 °C	30 °C
Pot life[1], mins *diluted 2% for brush / roll application.*	240	90	60
Touch dry time, mins	120	90	30
Tack free, hrs	8	4	2
Hard dry / sandable, hrs	21	6	4

[Determined in controlled laboratory conditions. To be used as a guide only.

[1] Pot life is indicative for a mix with 2% EPO-THIN 101 for brush / roller application, as stated above. Thinning at a higher percentage, within the range given below, will extend pot life.]

Recoat and overcoat times

PRO-PRIME 201 can be overcoated with the following:

- PRO-PRIME 201 / epoxy primers and tie coats,
- PRO-FILL series / epoxy fillers,
- PU based top-coats and their respective tie coats,
- Antifouling coatings, and tie coats for 1K / silicon / Teflon based antifouling.

Use the following table as a guide for recoating / overcoating times.

PRO-PRIME 201: Recoat / overcoat times						
	10 °C		20 °C		30 °C	
	min	max	min	max	min	max
Recoat/overcoat window, hrs	3	7 days	2	7 days	1	7 days

Consumption

- **Roll / brush application**
  @ 3% EPO-THIN 101: WFT 260 (DFT 180) microns, 10 m^2/lt.
- **Spray application**
  @ 30% EPO-THIN 201: WFT 260 (DFT 140) microns, 13 m^2/lt.
  @ 40% EPO-THIN 201: WFT 260 (DFT 130) microns, 14 m^2/lt.

Surface preparation

Both preparation and application should be carried out in optimal conditions, namely temperature in the range of 10-35 °C (ambient, substrate and product) and normal humidity levels. Following application, if temperature drops, curing will proceed, even close to 0 °C, albeit at lower speeds.

The application surface must be clean, free of dust, salt, water, grease, oil, wax, silicone, rust and other contaminants deposited over time or during the repair process.

For surfaces free of grease and oils, the recommended way of cleaning it is by dry cloths assisted by compressed air (free of compressor oils). Use a large cloth, apply very lightly and change

sides continuously so as to remove dust instead of pressing it on the substrate. Low grade grinding will help with more persistent residues and improve adhesion. Avoid using wet or waxed tissues. As an alternative, use **PRO-CLEAN IPA**, the fast drying, residue free, isopropyl alcohol solvent.

In the case of oily / greasy substrates, use **PRO-CLEAN X**, the xylene based cleaner. Ensure that no residues remain, either from the initial contaminants or from the cleaner.

Do not apply on substrates lacking cohesion. In such cases, unsound parts of the application surface must be removed.

Any filling required, should be done after a first layer of PRO-PRIME 201 and overcoated by the remaining layers.

PRO-PRIME 201: Surface prep, fairing grade	
Application of PRO-PRIME 201 on gelcoat / EP / VE / PE [1]	
Above waterline Below waterline	180-240 180
Application of PRO-PRIME 201 on carbon fiber	
	240-320
Application over PRO-PRIME 201 / 101 / epoxy primers[1]	
Above waterline Below waterline	240-320 180

[1] *For the case when the overcoat window expired.*

Mixing

Stir each component well before mixing. Using the indicative data given above, prepare quantities for one layer. Keep in mind that you have the option to alternate colors for each layer. Mix the two components until a uniform color has emerged.

Mix as follows:

PRO-PRIME 201: Mixing		
Part	**A**	**B**
By volume	2	1
By weight	3	1

Thinning

PRO-PRIME 201: Thinning			
	by volume	by weight	DIN cup 4, sec
EPO-THIN 101 Brush / roller application - suggested - range	 3 % 2-4 %	 1.8 % 1.2-3.6 %	 75 85-40
EPO-THIN 201 Spray application	30-40 %	18.5-24.6 %	17-15

Application

- **Roll / brush application**

  Roll primer onto surface aiming for uniform coverage. You may tip using a good quality brush in order to make small corrections.

- **Spray application**

  Use a 1.2 to 2.0 mm tip.

  Spray pressure: 275-380KPA (40-55 psi).

[You are advised to first test the product, surface preparation and ambient conditions on a non-critical part of the application surface before proceeding with the full repair.]

Cleaning

Clean application equipment using EPO-THIN 101/201.

Packaging

2 lt, 30 lt (total volume of both components).

Storage & shelf life

At least 24 months from the date of manufacture in the original sealed container. The ideal storage temperature is 10-25 °C at normal humidity levels.

Safety

Apply in well-ventilated spaces. Follow personal safety guidelines relating to epoxy products, including the use of proper mask and protective clothing. Avoid physical contact with the uncured substances.