

# **OSMOSIS TREATMENT & PREVENTION**



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### **Summary**

- Substrate preparation
- Sealing the substrate with "Impregard SF"
- Fairing with "Epoxygard"
- Filling with "Watertight or Blue filler"
- Protection & finishing with "Epoxygard"



## Substrate preparation



ANGUER MARINE PAINT PROTEAM

- ▶ Gel plane peeling or polyester grit blasting to abrade surface prior to treatment.
- Rinsing with fresh water & drying of laminate.
  Repeat it to ensure removal of any unwanted (salt, soluble residue) and moisture.
- Drying of laminate with adapted system depending on location and season: ventilation, air flow.
- ▶ Keep readings of Temperature/Humidity system records by checking systematically above and below the waterline.
- Before starting the treatment, be sure humidity rate of the hull is no greater than 5% to the rate above the waterline (Tramex 2 to 10 /scale1)



### Sealing the substrate (1st layer)



#### **IMPREGARD SF**

This solvent free epoxy coating is a resin with high-wetting/Impregnation features to rebuild initial aspect of damaged laminates.

- > Apply one thick coat by brush or roller.
  - If surface peeled with plane: 15m<sup>2</sup>/kg
  - If surface sandblasted: 8m²/kg
- Ensure that resin penetrates all crevices of the surface.

Temperature	15°C	20°C	25°C	
Overcoated by itself (without sanding)	Mini- Max 6h to 48h	Mini - Max 4h to 36h	Mini - Max 3h to 24h	
Drying time before sanding	36h	18h	14h	



### Sealing the substrate (2<sup>nd</sup> layer)



« Wick effects » on surface: Necessary to sand

Once dried: Sand the surface with grit P80 to lop the ends of fibreglass which go beyond the surface by "wick effect".

(Note: This operation is very important to avoid any risk of humidity absorption by capillary action).

- Apply a 2<sup>nd</sup> layer of **Impregard SF** by roller or airless.
  - allow to fill up last voids and wet out any dry fibre's.
  - Ensure the fibre's are fully coated in resin.
  - Recommended thickness : 120µ wet per coat.



## Fairing (3rd layer)



#### **EPOXYGARD**

High performance protective coating gives long wet on wet overcoating time. This layer provides a hard and uniform finishing aspect. This will highlight any hull defects before application of filler.

> Apply 1st thin layer of EPOXYGARD epoxy primer

• Recommended thickness : 150µ wet per coat

• Coverage : 6-7m<sup>2</sup>/L

Temperature	15°C	20°C	25°C
Overcoating time without sanding between IMPREGARD and EPOXYGARD	Mini/Max	Mini/Max	Mini/Max
	6h to 48h	4h to 36h	3h to 24h



## Filling



#### WATERTIGHT or BLUE FILLER

Fast-drying WATERTIGHT filler for low thickness application (5mm) and small local repairs (density 1) BLUE filler for high-thickness application and fairing of large surfaces (density 0,65)

- Application of filler is optional: depending on importance of surface imperfection (mixing ratio 1/1 in weight & volume)
- Sanding

Temperature	10°C	15°C	20°C	25°C
Overcoated time without sanding between	Mini/ Max	Mini/Max	Mini/Max	Mini/Max
EPOXYGARD and epoxy filler	8h to 5 days	6h to 4 days	4h to 3 days	3h to 2 days
Minimum time before Watertight filler sanding	9h	6h	4h	3h
Minimum time before Blue filler sanding	24h	16h	8h	5h



### Protection and finishing (4th -> 8th layer)



#### **EPOXYGARD**

Epoxygard is a high-protective epoxy primer giving high protection against moisture. It gives large overcoating window to aid easier application, also good resistance to abrasion.

Apply 4-6 coats of Epoxygard :

• By roller or spraygun (thinner: 10 - 20%)

Recommended thickness: 150μm wet/coat

• Coverage: 6-7m<sup>2</sup>/L

Respect overcoating time between layers to allow good evaporation of solvents.

Townsunting	10°C	15°C	20°C	25°C	30°C
Temperature	Mini - Max	Mini - Max	Mini - Max	Mini - Max	Mini - Max
Overcoated by itself	8h to 5 days	6h to 4 days	4h to 3 days	3h to 48h	2h to 36h
Overcoated by antifouling	8 to 30h	6h to 24h	4h to 16h	3h to 12h	2h to 8h
Drying time before Sanding	24h	16h	12h	8h	6h



### PRODUCT PACKS SIZES / PART NUMBERS

Product	Description	Colour		2,5 L		
IMPREGARD	Impregnation resin	Transparent		15.19.28		
			0,75L	2,5 L	5 L	20 L
EPOXYGARD	Watertight primer	Grey	15 19 90	15 19 91	15 19 92	15 19 93
		Ivory	15 19 95	15 19 96	15 19 97	-
				1 L	5 L	30 L
Blue Filler	Epoxy filler - Density 0,65	Light blue	-	-	15 18 42	15 18 44
Watertight	Epoxy filler - Density 1	Light pink	-	15 18 53	15 18 54	-
			0,75 L	2,5 L	-	-
DP	Thinner for EPOXYGARD		15 17 30	15 17 32	-	-

### **Epoxygard application**

Roller: Nautix DP thinner 5 to 10 % - coverage 6-7m<sup>2</sup>/l

Conventional spray: 2.0 to 2,5 bars, nozzle 1,6 mm to 2mm, Thinner DP 10 to 20% - coverage 4 to 6m<sup>2</sup>/l

Airless: 170 to 240 bars, nozzle 419 to 525 - Coverage 3 to 4 m<sup>2</sup>/l

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