



# OSMOSIS TREATMENT & PREVENTION



# Summary

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

# Substrate preparation



- ▷ 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 (1<sup>st</sup> layer)



## IMPREGARD SF

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

- ▷ Apply one thick coat by brush or roller.
  - If surface peeled with plane : 15m<sup>2</sup>/L
  - If surface sandblasted : 8m<sup>2</sup>/L
- ▷ 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 : 120 $\mu$  wet per coat.

# Fairing (3<sup>rd</sup> 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 1<sup>st</sup> thin layer of EPOXYGARD epoxy primer
  - Recommended thickness : 150 $\mu$  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 6h to 48h	Mini/Max 4h to 36h	Mini/Max 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 0,6)

- ▷ 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 EPOXYGARD and epoxy filler	Mini/ Max 8h to 5 days	Mini/Max 6h to 4 days	Mini/Max 4h to 3 days	Mini/Max 3h to 2 days
Minimum time before Watertight filler sanding	9h	6h	4h	3h
Minimum time before Blue filler sanding	38h	24h	15h	12h

# Protection and finishing (4<sup>th</sup> -> 8<sup>th</sup> 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.

Temperature	10°C Mini - Max	15°C Mini - Max	20°C Mini - Max	25°C Mini - Max	30°C 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			
<b>IMPREGARD</b>	Impregnation resin	Transparent	15.19.28			
<b>EPOXYGARD</b>	Watertight primer	Grey	0,75L	2,5 L	-	-
		Ivory	15 19 90	15 19 91	-	-
			15 19 95	15 19 96		
				1 L	5 L	30 L
<b>Blue Filler</b>	Epoxy filler - Density 0,6	Light blue	-	-	15 18 42	15 18 44
<b>Watertight</b>	Epoxy filler - Density 1	Light pink	-	15 18 53	15 18 54	15 18 58
			0,75 L	2,5 L	-	-
<b>DP</b>	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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