

SAFEGUARD TSF

TOTALLY SOLVENT FREE OSMOSIS PREVENTION COATING FOR GRP

SAFEGUARD TSF is a totally solvent free, two part epoxy coating that has been specifically developed for use on GRP hulls for protection against “osmosis”.

SAFEGUARD TSF contains carefully selected resins, fillers and additives which together provide the cured coating with extremely low permeability to oxygen and water vapour. The result is a coating that is abrasion resistant and is virtually waterproof. It should be used where an effective osmosis protection coating is required with the ability for multiple coats to be applied in quick succession without the fear of solvent entrapment.



This yacht was given a full osmosis treatment by Adrian Baker of Advanced Osmosis Technology using Easy Fair Epoxy Filler, Safeguard LVP and Safeguard TSF Epoxy Coatings

- **Totally solvent free**
- **Can be rapidly over-coated for quick completion of the job.**
- **Excellent inter-coat adhesion**
- **Excellent water barrier properties = excellent osmosis protection**
- **Choice of hardeners provide a choice of rapid re-coating or long over-coating periods**

SUBSTRATE PREPARATION

SAFEGUARD TSF should only be applied to GRP hulls, which are in good condition with low moisture content (recommended at below 5%). If the hull has a high moisture content, please refer to our “**OSMOSIS PREVENTION & REPAIR GUIDE**” for further details.

New GRP surfaces must be thoroughly degreased with SYNSOL 50 or 100 solvent using plenty of clean cloth, and thoroughly sanded to a matt finish with a dual action sanding machine to provide a mechanical key and improve adhesion. The sanded surface must then be wiped over with a clean cloth soaked in SYNSOL 50 or 100 solvent to leave the surface clean, dry and dust free.

On existing boats, all antifouling must be removed by using STRIPPIT antifouling remover, by scraping or by blasting. If the surface is glossy it must be abraded as above.

MIXING

Correct mixing is vitally important so please refer to our separate mixing instructions which are available by request or from our web site at <http://www.reactiveresins.com/coatings-mixing-instructions.html>

APPLICATION

SAFEGUARD TSF is best applied with a 7” short pile simulated mohair roller. Wash the roller before use and allow to dry to prevent bits of loose

fabric from spoiling the finished coating. Large diameter rollers produce a better finish than small diameter ones.

SAFEGUARD TSF must be spread evenly to avoid runs or curtains. Load the roller and apply in one direction to an area approximately 800 mm square. Roll at 90° to the first direction until the SAFEGUARD TSF has been spread evenly

SAFEGUARD TSF will become too viscous to be easily applied at temperatures below 12°C. Do not thin with solvent as this may cause solvent entrapment. In cold conditions use SAFEGUARD EA

OVER-COATING SAFEGUARD TSF does not contain solvent and therefore it can be over-coated as soon as it has cured sufficiently to prevent sagging. For maximum inter-coat adhesion additional coats should be applied before the previous coat has fully cured. A chemical bond will then form between each coat of SAFEGUARD TSF, which will enhance durability. If it is not possible to over-coat within the specified time the surface must be abraded to a matt finish before application of subsequent coatings.

For total protection, 5 coats, each with a wet film thickness of 110 microns should be applied before application of SYNERGY or a conventional antifouling. The minimum cured thickness should be at least 500 microns. If a perfectly smooth finish is required the final coat of SAFEGUARD TSF should be over coated with one coat of EASY FAIR SEU matt undercoat. This can be easily sanded to a smooth finish ready for antifouling.

When the SAFEGUARD TSF application has been completed it is the perfect time to apply SYNERGY long life metallic copper antifouling. SYNERGY gives excellent protection against fouling and will eliminate the annual chore of antifouling for up to 10 years.

IRON AND STEEL SAFEGUARD TSF will provide excellent protection to iron and steel that has been primed with ARMOURGUARD ST. Apply three coats for long term protection.

The finished coating should be left to cure before immersion for at least 7 days at a temperature not less than the minimum curing temperature of the hardener.

OSMOSIS TREATMENT COATING SEQUENCE		
Stage	Full treatment for gel peeled craft	Protective treatment for craft with low moisture readings.
1	Dust surface & ensure that it is clean & dry.	Remove old antifouling, degrease & sand to a smooth matt finish
2	Apply 1 coat SAFEGUARD LVP.	Dust surface & ensure that it is clean & dry.
3	Apply 5 coats SAFEGUARD EA	Apply 3 coats of SAFEGUARD EA or TSF
3	Apply 1 coat of EASY FAIR SEU	Apply 1 coat of EASY FAIR SEU
5	Sand with a DA sander to a smooth finish.	Sand with a DA sander to a smooth finish.
6	Optionally apply 1 coat SAFEGUARD TC tie coat.	Optionally apply 1 coat SAFEGUARD TC tie coat.
7	Optionally apply 4 coats Synergy antifouling	Optionally apply 4 coats Synergy antifouling

SAFEGUARD TSF - SPECIFICATION	
Type	Totally solvent free epoxy coating
Mix ratio	See label on tin
Hardener	Synamin 1058. 1055 or 1053
Resin Density	1.5 kg/litre
Coverage	6-8 sqm per litre, dependant on required thickness
Finish	Semi-gloss
Solvent	None required Synsol 300 for cleaning
Colours	Dark and light grey
Pack sizes	1, 2.5 and 5 litre
Shelf Life & Storage	12-18 months in original, unopened container. Store in cool, dry conditions

SAFEGUARD TSF OVER-COATING TIMES						
TEMPERATURE °C	5 TO 15		15 to 25		25 +	
	Min	Max	Min	Max	Min	Max
POT LIFE SYNAMIN 1058	40 minutes	60 minutes	25 minutes	40 minutes	20 minutes	25 minutes
OVER-COATING TIME	2 hours	2 days	1 hours	1 day	40 minutes	20 hours
POT LIFE SYNAMIN 1055	50 minutes	80 minutes	35 minutes	45 minutes	25 minutes	35 minutes
OVER-COATING TIME	3 hours	3 days	2 hours	2 days	1 hours	36 hours
POT LIFE SYNAMIN 1053	90 minutes	120 minutes	60 minutes	90 minutes	45 minutes	60 minutes
OVER-COATING TIME	12 hours	4 days	8 hours	3 days	4 hours	48 hours

HEALTH & SAFETY Please see Safety Data Sheet for full information. All users should ensure appropriate protective measures are adhered to when applying our products.

DISCLAIMER Customers are advised to thoroughly read and adhere to the instructions provided to ensure the products' optimum finish and performance. All information is based on results gained from experience and tests and is believed to be accurate but is given without acceptance of liability for loss or damage attributable to reliance thereon as conditions of use lie outside our control. Any deviation by the user to these instructions may affect the products performance and is therefore not advised. In this circumstance, Reactive Resins will not be held responsible and will be unable to offer any product replacement. Users should always carry out sufficient tests to establish the suitability of any products for their intended applications. We aim to ensure consistency of colour in production (where applicable), however small variations in shade may occur from batch to batch.

Please visit our web site at www.reactiveresins.com for details of our other products. They include resins and coatings for marine, industrial and flooring applications.