SAFEGUARD EA

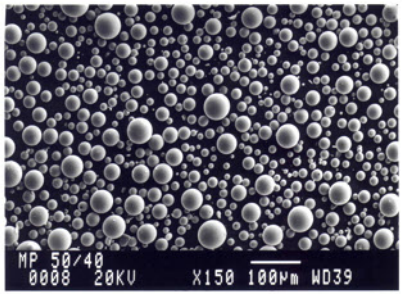
OSMOSIS PREVENTION COATING FOR GRP

SAFEGUARD EA is a low solvent, two part epoxy coating that contains a high content of minute ceramic micro-spheres which enhance the epoxies natural water resistant properties. It has been specifically developed for use on GRP hulls to provide protection against "osmosis". The result is a coating which is incredibly abrasion resistant and which has extremely low permeability to oxygen and water vapour. It should be used where an economical but effective osmosis protection coating is needed without the requirement for rapid over-coating.

SURFACE PREPARATION SAFEGUARD EA 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 100 solvent using plenty of clean cloth, and thoroughly sanded to a matt finish with a nippy disc or 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 solvent to leave the surface clean, dry and dust free.

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



The ceramic micro-spheres are totally impervious to water. Their perfectly spherical shape enable a high packing density in the coating that help prevent water penetration.

MIXING Epoxy resins and hardeners must be thoroughly mixed in the correct ratios to ensure complete curing of the product. Each can of SAFEGUARD EA is supplied with the correct amount of hardener, all of which must be added to the can of resin and mixed well immediately before use. Do not try to accelerate or retard setting of the material by varying the amount of hardener used as this will cause the coating not to set at all, or to prematurely fail. Thorough mixing is also critical to the correct curing of the product and although small packs can easily be mixed by hand, a spiral mixer used in a pneumatic or cordless drill is essential for mixing larger packs. Once mixed SAFEGUARD EA will remain usable for between 30 and 90 minutes, depending on the ambient temperature. Pot life can be extended by pouring the mixed material into trays which will allow the exothermic heat generated by the curing reaction of the resin and hardener to dissipate. If a small amount of material is required the components must me accurately weighed in the proportions shown on the hardener label. In cold weather up to 5% SYNSOL solvent may be added to reduce the viscosity of the material.

Mix thoroughly with a spiral mixer used in a cordless drill

APPLICATION SAFEGUARD EA is usually 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. A special grade is available for application by conventional or high-pressure airless spray.

SAFEGUARD EA 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 EA has been spread evenly. To obtain a smoother finish, the stippled effect imparted by the roller can be removed by laying off with a good quality 4 or 6 inch brush.

Before application of successive coats, remove any nibs or imperfections with abrasive paper. For total protection, 5 coats, each with a wet film thickness of 110 microns should be applied before application of COPPERPLUS or a conventional antifouling. Minimum cured thickness should be 500 microns.

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OVER-COATING 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 EA, 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.

The final coat of SAFEGUARD EA should be over coated with one coat of EASY FAIR SEU matt undercoat. This will fill brush marks and roller stipple and can be easily sanded to a perfectly smooth finish ready for antifouling.

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

IRON AND STEEL SAFEGUARD EA will provide excellent protection to iron and steel that has been primed with ARMOURGUARD S. 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 PS primer.	Optionally apply 1 coat SAFEGUARD PS primer.
7	Optionally apply 2 coats Copperplus antifouling	Optionally apply 2 coats Copperplus antifouling

OVER-COATING TIMES						
TEMPERATURE ^{O}C	**5 TO 15**		**15 to 25**		**25 +**	
HARDENER	**SYNAMIN 1045**		**SYNAMIN 1043**		**SYNAMIN 1040**	
	Min	**Max**	**Min**	**Max**	**Min**	**Max**
SAFEGUARD EA	**12 hours**	**5 days**	**8 hours**	**3 days**	**5 hours**	**2 days**

SPECIFICATION	
Type	**Two part, low solvent epoxy-ceramic coating**
Solids content	**95%**
Weight	**1.5kg/litre**
Coverage	**8 m^2 per liter per coat**
Mix ratio	**4 parts resin to 1 part hardener, by weight**
Solvent	**SYNSOL 300 fast spray solvent**
Colours	**Pale & mid grey**
Pack sizes	**0.5, 1, 2.5 and 5 litre**