

CODE: EP-270

PRODUCT NAME:

Solvent Free Epoxy Applied Underwater (Tide Guard)

DESCRIPTION:

EP- 270 is a two component, solvent free epoxy which can be applied underwater, and will cure underwater to give a corrosion and abrasion resistant coating. This coating is as a hand applied repair compound for application to submerged steelwork and splash zone areas of offshore jackets, piling and other permanently wet areas where conventional cannot be used.

EP-270 can also be used on concrete; glass reinforced materials, and is suitable for use at new construction as well as maintenance.

TECHNICAL DATA:

Binder	Epoxy resin
Pigment	Suitable pigments
Finish	Flat
Shade	Green
Specific gravity after mixing	1.35±0.05Kg/Lit
Volume solid	100 %
Flash point	27 °C
Typical dry film thickness	4000- 6000Microns per one coat
Number of coat	One
Mixing ratio by weight	Base : 100 parts Hardener : 35 parts
Substrate	Mechanically cleaned steel or concrete
Thinner	NOT REQUIRED
Theoretical spreading rate (at 6000microns)	0.17 M ² /Lit
Packing	Base : 5 kg Hardener : 1.75 kg
Shelf life	12 Months

EP-270/1

Drying Time

Temp	Touch dry	Hard dry	Overcoating		Full cure
			Min	Max	
15°C	Not applicable	24 hours	Not applicable		14 days
25°C	Not applicable	10 hours	Not applicable		7 days
40°C	Not applicable	3 hours	Not applicable		4 days

Note: Drying times are dependent on applied film thickness; all data in this catalogue are reported at recommended DFT.

Pot life

Temp. of paint	15°C	25°C	40°C
Pot life	60 minutes	45 minutes	15 minutes

SURFACE PREPARATION

The performance of this product will upon the degree surface preparation. All Surfaces to be coated should be clean, dry and free from contamination. Prior to Paint application all surfaces should be assessed and treated in accordance with ISO 8504:1992.

Primed Surfaces

EP-270 should always be applied over a recommended anti-corrosive coating scheme. The primer surface should be dry and free from all contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:1992.

Accumulated dirt and soluble salts must be removed. Dry bristle brushing will normally be adequate for accumulate dirt. Soluble salts should be removed by fresh water washing.

Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Abrasive Blast Cleaning

Abrasive blast cleans to Sa 2½ (ISO 8501-1:1988) or SSPC-SP10. If oxidation has occurred between blasting and application of EP-204, the surface should be reblasted to the specified visual standard. Surface defects revealed by the blast cleaning process, should be ground, filled, or treated in the appropriate manner.

A surface profile of 75-100 microns is recommended.

When applying to bare steel substrate below water or in permanently wet conditions the surface should be prepared by power diskling a carborundum disc or by needle gun to achieve a clean, roughened surface in accordance with SSPC-SP11, power tool cleaning.

EP-270/2

Application Method

Mixing:

For small areas (5.0-7.5 cm diameter), small, handle able quantities of EP-270 should be mixed and then taken to the diver to the area to be repaired. For larger areas only one 6 liter unit should be mixed at a time. To remove contents from tins, cut both top and bottom of the tin and push the material out. In cold weather, warming may be necessary. Mixing should be carried out on a large, clean smooth sheet of steel, tinplate or hardboard using palette knives, scraper blades or trowels. DO NOT ADD WATER OR THINNERS TO THE MIX as this will reduce strength of cured composition. The material should be thoroughly mixed until the separate green and blue white have been completely merged to a bright green colour, free of green and white streaks. Avoid beating air into the mixture and 'fold' the components together.

Application - Underwater:

This is a fairly difficult technique which requires thorough planning. For small areas, 5.0-7.5 cm diameter, small, handle able quantities of EP-270 should be mixed then taken by diver to the area to be repaired. Always ensure small amounts of material are fully adhered to the substrate before progressing.

When EP-270 has exceeded its working pot life the product commences curing, it becomes rubbery, and this change in character can be easily observed. At this stage the product must be discarded.

Further material must not be mixed on top of cured or curing material. Therefore use a fresh surface for mixing or thoroughly clean the surface with solvent.

EP-270 is a specialist product designed for a specific end use.

HEALTH AND SAFETY:

This product is Flammable. Keep away from heat and open flame .Keep container closed .Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent hazards of fire or explosion or damage to the health:

EP-270 /3