



RSI
INDUSTRIAL
PAINTS Inc.

EPOXY UNDER WATER CURABLE COATING REP-125

PRODUCT DESCRIPTION

REP-125 is a two component, solvent free epoxy which can be applied underwater, and will cure underwater to give a corrosion and abrasion resistant coating. As a hand applied repair compound for application to submerged steelwork and splashzone areas of offshore jackets, piling and other permanently wet areas where conventional coatings cannot be used. can also be used on concrete, glass reinforced materials, and is suitable for use at new construction as well as maintenance.

GENERAL PROPERTIES

Adhesion	Excellent on correctly prepared steel surfaces.
Corrosion Resistance	Excellent on correctly prepared steel surfaces.

PHYSICAL PROPERTIES

Color	Green
Finish	Semi Flat
Volume Solid	100%
Theoretical spreading rate	0.17m ² /liter @ 6000 Mic. Dft.
Flash point	101 °C
V.O.C.	0
Shelf life	18 months (25°C) from time of production. Depending on storage condition, mechanical stirring may be necessary before usage. Storage environment should be ventilated and away from sunlight and high temperature (above 30 °C)

MIXING

Mixing ratio (by volume)	Component A: 1.14	Component B: 1
Pot life	20 min (25 °C)	

APPLICATION

Conditions	To remove contents from their tins, cut both the top and bottom of the tin using a tin opener 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. Application is by hand moulding. Applicators must wear rubber nitrile gloves and appropriate skin protection. Gloves may be moistened with water to assist in application. For more information see remarks.		
Method	Hand moulding	Palette knife	Trowel
Thinner	should not be thinned under any circumstances.		
Cleaning tools	RTH-112		
Indicated film thickness, dry	4000-6000 micron		
Indicated film thickness, wet	4000-6000 micron		

DRYING AND CURING TIMES

Condition	Drying and curing times are determined under controlled temperatures, relative humidity and at average of the DFT range for the product.
Surface temperature	25±3°C
Hard drying time	8-48 hours (It may changes, depends on area of use)

APPLICATION CONDITION

Surface preparation

The performance of this product will depend upon the degree of surface preparation. The surface to be coated must be clean and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:2000. Accumulated dirt and soluble salts must be removed. Dry bristle brushing will normally be adequate for accumulated 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 clean to Sa2½ (ISO 8501-1:2007) or SSPC-SP10. If oxidation has occurred between blasting and application of REP-125, 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 substrates below water or in permanently wet conditions, the surface should be prepared by power discing with a carborundum disc or by needle gun to achieve a clean, roughened surface in accordance with SSPC-SP11 Power Tool Cleaning.

REMARKS

Onshore (New Fabrication, Dry Conditions)

Application is by hand moulding. Applicators must wear rubber nitrile gloves and appropriate skin protection. Gloves may be moistened with water to assist in application. Check the overall film thickness by pressing a sharp spike marked (6000 microns) into the coating

Offshore (Intermittently Wet Area)

(1) Use PVC mesh cut to size and wrapped tightly around the substrate. Use wire to secure the mesh firmly so that it does not slip. All wire must be tacked under the mesh. After mixing force well into the mesh using gloved hands.

(2) Lay a sheet of PVC cloth on the ground and coated to approx. 6000 micron. Place the coated PVC onto the steel and wrap around the substrate using a rope or wire to keep it in place. The PVC sheet can be peeled off after the coating has cured.

Underwater

This is a fairly difficult technique which requires thorough planning. For small areas, (5000-7500 micron) diameter, small, handleable quantities should be mixed and then taken by diver to the area to be repaired. For larger areas either of the methods described above can be used.

Curing time

When REP-125 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.

Systems Compatibility

In most circumstances this product is applied direct to steel and is not overcoated. Where a blast holding primer may be required then Interline 982 should be used and must be overcoated within a maximum of 10 days

SAFETY

This product is intended for use of professional applicators. Applicators and operators shall use appropriate protection equipment when using this product. Use it in well ventilated environment and prevent direct contact with skin. Spillage on the skin should immediately be removed with suitable cleaner. Eye should be well flushed with water and medical cleaner.

RSI Co.

Product data sheet REP-125

July 2022

