

DUROGLASS SUB

THIXOTROPIC EPOXY PASTE
FOR UNDERWATER REPAIRS AND COATINGS



CHARACTERISTICS

Waterproof, resistant to marine fauna and vegetation.

Curing capacity even **under water** adhering optimally to steel or concrete substrates.

Very **thixotropic** consistency, such as to facilitate laying operations especially as regards its use as a repair product for concrete in underwater applications.

It meets the requirements of the **1504-2** standard for coatings: product for protection against penetration risks 1.3, humidity control 2.2, chemical resistance 6.1, increase in resistivity 8.2.

APPLICATION TEMPERATURE

Applicable **from +5°C to +40°C**.

OPERATING TEMPERATURE

Operating temperature **from -25°C to +45°C** (in water).

APPLICATION FIELDS

- Protective coating of steel works immersed in sea water.
- Grouting, repairs, coating of concrete products immersed in fresh and sea water.
- Repair of concrete structures of tanks where long deactivation and dry surfaces are not possible.

DUROGLASS SUB

SUBSTRATE PREPARATION

- The surfaces to be treated must be **intact, compact, be free from vegetation**).
- The **steel surfaces**, if already **painted**, can be subjected to hydro-cleaning, brushing or better sandblasting, if underwater sandblasting.
- The **concrete or metal surfaces** must be prepared by sandblasting or hydro-jet until all traces of sludge and crumbly and non-adherent parts are eliminated.
- **Steel surfaces** should be treated immediately after water jet blasting to Sa2½ or WJ 2.

PRODUCT PREPARATION

Given the extremely thixotropic consistency it is not possible to mix it with normal mechanical stirrers. The product must be dosed and mixed with precision using suitable equipment or manually as described below.

The consistency of the product also allows it to be taken from the packs by hand (fitted with gloves), weighed and then hand mixed. During these operations it is essential to keep your hands wet or alternatively mix the product immersed in water to prevent adhesion.

Base and hardener are supplied in different shades to help control perfect mixing. Achieving a uniform colour without streaks is an indication of correct mixing.

DILUTION AND COLOUR

The product cannot be diluted.

The product is available only in the final green or blue (the two components A and B are of different colours).

DUROGLASS SUB



PRODUCT APPLICATION

After manual mixing, a paste is thus obtained which is passed to the diver for application, which must be carried out manually by pressing the paste against the surfaces and adapting it to the desired thickness.

Minimum coating thickness on steel surfaces must be 4 mm.

The indicative consumption of **DUROGLASS SUB** is 1.63 Kg/m² per mm of thickness.

WARNINGS AND PRECAUTIONS

- For applications in fresh water, provide suitable thicknesses for the possible formation of 1-2 mm of surface inconsistency

SAFETY AND CLEANLINESS

When applying these products, it is recommended to use goggles, masks and rubber gloves and all the PPE required by current regulations.

Work tools must be cleaned using **water** and detergents.

For more information regarding the precautions for use, please refer to the safety data sheet.



DUROGLASS SUB

TECHNICAL DATA		
Colour		Green, blue
Specific weight	UNI EN ISO 2811-1	1,63 ± 0.03 Kg/l
Mix ratios		100 parts by weight or volume of basic (white) 100 parts by weight or volume of hardener (green or blue)
Pot life 22°C	UNI EN ISO 9514	40 minutes
Practical use time		20 minutes
Theoretical consumption		1.63 Kg/m ² per mm of thickness
Curing at 22°C, 50% R.H.		- dry to the touch: 4 hours - fully cured: 7 days
Permeability to carbon dioxide	EN 1062-6 (method A)	Sd > 50
Permeability to water vapour	EN ISO 7783-1	Sd > 30
Capillary absorption and water permeability	EN 1062-3	W < 0.1 kg/m ² · h ^{0.5}
Direct bond strength	UNI EN 1542	> 3,0 MPa
Impact resistance	EN ISO 6272-1	10 Nm
Adhesion to green concrete	EN 13578	No swelling, no cracking, no flaking ≥ 1,5 N/mm ²
Adhesion to sandblasted steel	ASTM D4541	> 5,0 MPa
Resistance to severe chemical attack	EN 13529	Sodium Chloride 20%: Class I and II
Storage		The product in its original sealed packaging kept in a dry and protected place, at temperatures between +5°C and +35°C it is conserved for 12 months

CR12: Sodium Chloride Aqueous Solution (20%)

The data and instructions given in this sheet, based on the best practical and laboratory experiences, are to be considered in any case indicative. Considering the different conditions of use, and the intervention of factors independent of MPM (support, environmental conditions, technical laying direction, etc.) whoever intends to use it is required to establish whether or not the product is suitable for use. Our warranty obligation is limited to the quality and constancy of the finished product for the above data, only for technical sheets accompanied by stamp and countersignature by our delegated personnel. site. Furthermore, the customer is required to verify that these values are valid for their relevant batch of product and are not superseded and/replaced by subsequent editions and/or new formulations. The data contained may vary at any time without prior notice by MPM.