

DIFFGLASS 1000

TechnicalData: DIFFCOR/CR/06-18

Product Description:

DIFFGLASS-1000 is modified Polyester resin based Glass flake filled poly-ceramic compound for metals damaged by erosion / corrosion. DIFFGLASS-1000 is a specially designed two component system that withstands from sea water to harsh chemicals.

Application:

DIFFGLASS-1000 is ideal for repair and rebuilding Jetty Piles and Jacket Legs Offshore structure, Heavy duty marine application like tanks, pipelines etc.

DIFFGLASS 1000 Provides impermeable barrier to corrosive environment and is suitable for steel and concrete surfaces. Excellent resistance over wide range of chemical, corrosive and abrasive environments. DIFFGLASS 1000 has low maintenance and ease of reparability. Temperature range 20 °C to 120 °C.

Technology	Polyester Glass Flake
Chemical Type	Polyester
Appearance(Base)	White
Appearance(Activator)	colorless
Appearance(Mixed)	White
Components	Two component-requires mixing
Mix Ratio, by volume Resin: Hardener	98.5 : 1.5
Mix Ratio, by weight Resin: Hardener	98.5 : 1.5
Cure	Room temperature cure
Application	Sea Water Application

TYPICAL PROPERTIES OF UNCURED MATERIAL

Base:

Viscosity: Sprayable/Brushable
Weight per liter: 1.5 kg/liter

Hardener:

Viscosity: liquid
Weight per liter: 0.85 kg/liter

Mixed:

Viscosity: can be Spray/brush
Coverage: 0.6 m² @ 1mm thick/1kg

TYPICAL CURING PERFORMANCE

Curing Properties

Gel Time @ ambient temp: minutes 50 to 60

Curing time vs. Temperature

Ambient temp	20°C	25°C	30°C
Pot life	55-60min	50-55min	45-50min
Full cure	18hrs	14-16hrs	10-12 hrs.

Typical cured properties of material

Compressive strength (ASTM D642) 11000-11500 Psi
Flexural strength (ASTM 790) 9000-9500 Psi
Hardness shore D (ASTM D2240) 80-85
Tensile strength (ASTM D882) 3500-4000 Psi
Elongation At break % (ASTM D882) 0.98
Shear strength (ASTM D1002) 1500-2000 Psi
On grit blasted MS surface
Abrasion resistance (ASTM D4060) 138 mg
H-18 wheels, 1000 cycles
Water vapor permeability (ASTM D1653) 0.00072

Surface preparation: Clean surface to remove oily, rust and any foreign particles. Abrasive blasting with compressed air to achieve surface preparation of SA 2^{1/2} or Metal surfaces should be grit blasted to a SSPC-SP5 or NACE #1.

For Concrete surface should comply with moisture testing as prescribed by ACI Test Method 515, R- 16 "Dryness of Surface". Concrete surface profile of 100 to 120 grit sandpaper.

Application Procedure:

Pour activator into DIFFGLASS 1000 base Container. Mix thoroughly until a proper blend is attained after the saturated basecoat has dried, grind down any burrs that have appeared on the surface. For hand application use trowel / specially designed brush or for spray, 1 to 2 coats of a DIFFGLASS 1000, selected according to chemical exposure. Second coat can be applied as soon as first coat is tack free.