



Polyester Resin Grout

DESCRIPTION

EPODURE PS is a rapid setting polyester-based resin grout, suitable for grouting components where exceptionally high mechanical properties are required before an early return to service. The product comprises of a base component and a catalysed filler component. The product can be mixed to the desired consistency and will achieve compressive strengths in excess of 70 MPa within 2 hrs. Once cured, the grout will resist high impact and dynamic loads. The grout is suitable for placement in temperatures down to 00C. The cured grout offers excellent resistance to chemicals and petroleum.

USES

EPODURE PS is used as a flowable grout for situations where exceptionally high compressive strength is required at an early age. This facilitates an early return to service in critical zones, including airfield lights and cable slots, grouting of highways iron work, grouting of rail track base plates and other critical components.

ADVANTAGES

- Ultra-rapid compressive strength gain.
- Excellent bond to concrete, asphalt and metal substrates.
- Good chemical resistance once cured.
- Suitable for cold weather application.

Property	Value
Colour	Grey/Brown
Density	1870 kg/ m ³
Pot Life	20 mins @ 20°C
Application Temperature	0°C to 30°C
Compressive Strength	70 MPa @ 2hrs 91 MPa @ 4hrs 98 MPa @ 1 Day 104 MPa @ 7 Days
Tensile Strength	16.4 MPa
Elastic Modulus	9.4 GPa
Adhesive Bond to Concrete	>2 MPa
Adhesion After 50 Freeze- Thaw Cycles	>2 MPa
Creep Under Tensile Load	0.4mm
Reaction to Fire	Class BS1D0

PROCEDURE

Surface Preparation: Concrete surfaces should be free from surface laitance, dust, oil, grease and other deleterious materials. Steel surfaces should be free from rust, the area to be grouted should be free from standing water and dry to touch. Form work should be constructed around the component to be grouted, taking special care to ensure that the form is fully grout tight to prevent leakage, a suitable silicone-based release agent should be applied to the form work to prevent bond of the grout to the form, alternatively a polythene sheet maybe used to line the form.

Mixing: The base resin component should be emptied into a suitable mixing vessel, the catalysed filler component should then be added to the resin whilst mixing using a slow speed drill and mixing paddle, until the desired consistency is achieved. Mixing should continue until a homogeneous grout is formed that is of uniform consistency. The mixed grout has a very short pot life therefore placement of the grout should commence immediately.





Application: The mixed EPODURE PS should be allowed to stand for at least 5 minutes to allow for the release of any trapped air. The grout should then be poured continuously into the prepared form work, ensuring that placement is from one side of the form work only. When multiple units of grout are used, then they should be mixed and poured continuously. EPODURE PS is suitable for placement in gap widths between 5mm and 75mm, for greater widths then consult the Premcrete technical department. The placed grout should remain undisturbed until fully hardened.

Curing: EPODURE PS would have hardened sufficiently after 1hr to allow full vehicular trafficking. Full chemical cure would have taken place after 7 days.

Equipment Cleaning: Tools and equipment should be cleaned immediately using PREMCRETE SOLVENT CLEANER.

PACKAGING & COVERAGE

Pack Size: EPODURE PS is supplied as a 25kg pack.

Coverage: 1 x 25kg pack will yield 12.5ltrs of mixed grout. 1 pack will cover 1.25m² at 10mm thickness.

STORAGE & SHELF LIFE

EPODURE PS should be stored in clean dry conditions at temperatures between 5°C and 35°C. When stored in unopened containers, the product will have a shelf life of 12 months.

HEALTH & SAFETY

See separate material safety datasheet.

