

Polygrout EY 3000(PH)

Pile head epoxy resin bedding grout and mortar

High performance epoxy resins, specially graded aggregates and additives provides excellent mechanical properties.

CHARACTERISTICS

- ▶ High compressive strength
- ▶ Resistant to high temperature
- ▶ Excellent chemical resistance
- ▶ Excellent impact and abrasion resistance
- ▶ Early strength development
- ▶ Compatible with bitumen based waterproofing membranes and coatings



DESCRIPTION

Polygrout EY 3000 (PH) is a three component solvent free epoxy resin based bedding grout and mortar used for pile head encapsulation. It is a combination of high performance epoxy resins, specially graded aggregates and additives to provide excellent mechanical properties. Polygrout EY 3000 (PH) fully bonds with the pile head and forms a watertight system by preventing any seepage from cracks and capillaries in the pile head.

FIELDS OF APPLICATION

- pile head encapsulation to ensure water tightness
- bridge bearing pads
- anchoring of crane rails, towers and dock sills
- anchoring of bolts and rebars from 15mm - 60mm diameter in concrete, brick work, masonry and rock
- installation of reinforced concrete starter bars, foundation bolts and railway tracks

APPLICATION INSTRUCTIONS

Surface preparation

Surfaces shall be structurally sound and clean of all contaminants like mould release agent, curing compound, grease, paint and cement laitance. The area shall be dry and free of standing water. Surface cleaning by grit/captive blasting or wire brushing is recommended depending on the degree of contamination. A watertight shutter shall be erected all around the area where Polygrout EY 3000 (PH) shall be poured. Any gaps or openings below the formwork



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or on joints shall be sealed with a suitable mastic sealant or a rubber seal.

CAUTION: Resin leakage from the grout will result in segregation. The formwork shall be coated with a heavy duty mould release oil to ensure easy deshuttering.

Mixing

Mix part a and part b separately for a minute using a slow speed drill (300 - 400 rpm) fitted to a suitable paddle mixer. Then add part b into part a and mix thoroughly for 1-2 minutes. Add part C aggregates slowly into the mix and further mix for another for 3-4 minutes till a uniform and homogenous consistency is achieved.

Note: All parts are pre-weighed and no part mixing is allowed.

Placing

Pour the mixed Polygrout EY 3000 (PH) immediately after mixing and within the pot life. The grout shall be poured continuously from one corner or side to avoid entrapment of air. Spread the poured grout evenly with a steel trowel. for congested areas it is recommended to lightly tamp the shutters with a rubber mallet to remove the entrapped air.

Note: The grout which has exceeded its pot life shall not be used and be discarded immediately.

CLEANING

All tools shall be cleaned with Polysolvent immediately after use. Hardened materials can be removed mechanically only.

STORAGE & SHELF LIFE

Store the material in a dry, cool and shaded condition. In tropical climates the product must be stored in an air-conditioned environment. The shelf life of the product is up to 12 months when stored as per recommendation. Excessive exposure to heat, UV and sunlight will result in the deterioration of the quality of the product and reduce its shelf life.

HEALTH & SAFETY

As with all construction chemical products caution should always be exercised. Protective clothing such as gloves and goggles shall be worn. Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

SUPPLY

Polygrout EY 3000(PH) 15L kit wt 30kg#

Approximate weight

TECHNICAL SPECIFICATION

| PROPERTIES | VALUES | TEST STANDARDS |
|--|---|------------------------|
| Color | Dark grey | - |
| Mixed density, [g/cc] | 2.1 ± 0.05 | ASTM D 1475 |
| Pot life, [minutes] | 60 | - |
| Compressive strength @7 days, [N/mm ²] | >70 | ASTM C 579 |
| Flexural strength@7 days, [N/mm ²] | >20 | ASTM C 580 |
| Tensile strength @7 days, [N/mm ²] | >10 | ASTM C 307 |
| Adhesion strength @7 days, [N/mm ²] | >2.5 | BS 1881 ASTM D 4541 |
| RCP | Nil | ASTM C 1202 |
| Water permeability @5 bar | Nil | BS EN 12390 |
| Chemical resistance | ph 2.5 to 11.5, sea water, hydrocarbon fuels, | - |
| Application thickness, [mm] | 10 [min] | - |
| [mm/pour] | 80 [max] | - |
| Application temperature, [°C] | 5 to 35 | - |
| Service temperature, [°C] | 5 to 70 | - |

All values given are subject to 5-10% tolerance

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.