

# POLYESTER CONCRETE SUMMER-WINTER

## Product Codes

TP46(S), TP46(W)

Packaging listed overleaf

## Description

Polyester Concrete is a polyester resin based material suitable for the repair, surfacing, jointing and bedding of concrete, brickwork and masonry.

The product is supplied as a two pack system ready for on site mixing, consisting of a tin of base resin and a bag of catalysed filler. The mixed mortar will harden to give rapid strength gain reaching 20N/mm<sup>2</sup> in 2 hours. The mixed Polyester Concrete can be placed in section thicknesses of 5mm to 50mm in single layers. Thicker sections can be achieved by placing multiple layers. The bond strength developed is stronger than the tensile strength of most construction materials. Placed fixtures will resist high compressive and high impact loads.

The chemical setting and hardening mechanism will continue at temperatures down to 0°C with only a small increase in hardening time. The hardened mortar is resistant to chemical attack from a wide range of chemical media.

- Uses include:**
- Bedding and fixing of precast concrete units
  - Fixing of concrete barrier units
  - Patch repairs to concrete floors
  - Bedding of coping stones
  - Infills where rapid service use is required

## Typical Concrete Properties @ 20°C Compressive Strength

2 Hours	6 Hours	8 Hours	1 Day
20N/mm <sup>2</sup>	60N/mm <sup>2</sup>	70N/mm <sup>2</sup>	80N/mm <sup>2</sup>

**Flexural Strength** 25N/mm<sup>2</sup>

**Tensile Strength** 12N/mm<sup>2</sup>

**Density** 2000kg/m<sup>3</sup>

**Shrinkage** Less than 1% linear

### Working Time

Winter Grade 8 - 12 minutes  
(above 20°C setting will be rapid)

Summer Grade 18 - 22 minutes  
(below 10°C setting will be extended)

## Specification Outline

Bonding, bedding and repair of concrete, brickwork and masonry units shall be carried out using Polyester Concrete as manufactured by TecRoc Products Ltd. The product must be stored, handled and placed strictly in accordance with the manufacturer's instructions.

## Quality Assurance

Tecroc Products Ltd is a firm of Assessed Capability. The Company's quality system conforms to BS EN ISO 9002:1994 and is assessed by SGS Yarsley International Certification Services Ltd.

## Standards

Polyester Concrete has been tested in accordance with the relevant parts of BS 6319

## Instructions For Use

### Preparation

Remove laitance and all loose material including dust, oil and grease to achieve a sound substrate. Smooth surfaces should be roughened to produce a good mechanical key. Working surfaces should be in a surface dry condition.

### Mixing

For single pack mixing, pour the resin into a suitable mixing vessel such as a rubber or polythene bucket. Slowly add the catalysed filler whilst continuously mixing. Mixing can be carried out using a slow speed high torque drill and Mortar Stirrer. For larger mixes a forced action Cretangle or Mixal mixer should be used.

## Instructions For Use

### Placing

Polyester Concrete should be placed within the following dimensions:

- Thickness Up to 50mm in one layer.
- Plan area Up to 0.5m<sup>2</sup> laid chequer board.
- Linear run Up to 1.0m linear.

For thicker applications build up the required thickness in layers. The surface of the previous layer should be scored, before the material has set, to produce a mechanical key.

The mixed material should be placed as soon as mixing is complete as the chemical reaction of setting is rapid.



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## Instructions For Use

### Placing

For placing use a clean steel trowel. The surface of the trowel should be cleaned using a cloth dampened with Solvent. Compact well onto the prepared work surface to obtain optimum results. When adhering to very dense surfaces a thin layer of resin rich material should be applied first to thoroughly wet out the surface. A smooth finish will be obtained by the use of the steel trowel dampened with Solvent.

Mixing equipment and tools should be cleaned with Solvent before the Polyester Concrete has hardened.

Polyester Concrete can be placed at temperatures between 0°C and 35°C. For placing at temperatures outside this range contact the Technical Service Department.

### Curing

No special curing methods are required

## Precautions

### Health and Safety

Polyester Concrete is a resin based product. Resins and solvents may cause allergic reactions in some people. Wear gloves, use barrier cream on unprotected skin areas and wear eye protection when mixing, using and cleaning. Ensure adequate ventilation to prevent inhalation of vapours. If skin contact occurs remove resin immediately with cleansing cream and wash with soap and water. Do not use Solvent. Should eye contact occur rinse immediately with plenty of clean water and seek medical advice. If swallowed do not induce vomiting. Seek medical advice immediately.

Full health and safety data are given in Product Safety Data Sheet

### Fire

Polyester Concrete is classified as flammable.

Solvent is flammable.

Should fire occur extinguish with CO<sub>2</sub> or foam.

## Yield

The volume yield of each 15 kg pack of Polyester Concrete is approximately 7.5 litres of mixed concrete.

## Storage And Shelf Life

Polyester Concrete will have a storage life of 6 months in unopened containers when kept in dry conditions at a temperature between 5°C and 25°C. Storage at higher temperatures and high humidity may reduce shelf life.

## Packaging And Ordering

Polyester Concrete is supplied in 15kg packs.

Summer Grade                      Product Code TP46(S)

Winter Grade                        Product Code TP46(W)

Solvent is supplied in 5 litre and 1 litre tins

5 litre tins                            Product Code TM02

1 litre tins                            Product Code TM08

For further information and sales please contact your local Tecroc Products office as listed below.

Tecroc Products Ltd products are guaranteed against defective materials and manufacture. Products are sold subject to the Tecroc Products Ltd Terms and Conditions of Sale, copies of which are forwarded on invoice and are available on request. Tecroc Products Ltd endeavours to ensure that the above data and any further advice is correct, however, it cannot accept any direct or indirect liability for the use of its products as such usage is beyond its control.