

FAST CURE GROUT

epigen FC4

A very fast curing, tough solvent free composite grout developed to be used as a multipurpose high strength casting adhesive polymer. Possesses excellent chemical resistance, corrosion resistance, and high structural integrity under stress in both compression and tension.

This product is designed to be effectively used in hot or cold climates, and may be blended with graded aggregate without appreciable loss of strength.

Suitable for use on a variety of surfaces including steel, wood, and concrete. Use as a chemical anchor or grout, adhesive and concrete restoration compound.

TYPICAL APPLICATIONS

Civils Foundation Bedding
Marine and Slipway Foundations
Roadway or Bridge Grouting
Bedding Rails
Floor Re Levelling
Concrete Repair
High Strength Adhesive
Casting and Mould Making
Chemical Anchoring
Precision Grouting
Crack Repair
Wet to Dry Concrete



FEATURES

High mechanical strength
Extremely strong adhesive
Broad spectrum chemical resistance
Cures in 1 hour
Free of all solvents - zero VOC
Cures even when applied under cold adverse conditions
Suitable for underwater use
Low conductivity in electrical potting

PROFILE

Ratio by weight	10 parts Component "A" 1 part Component "B"
Pot Life minutes @ 24°C	30
Mixed consistency @ 24°C	Flowable Liquid
Specific gravity when mixed	1.7

MECHANICAL CURED PROPERTIES

Compressive strength ASTM D695, Mpa	>110
Compressive strength after 24 hours, Mpa	>95
Tensile strength ASTM D638, Mpa	>25
Flexural strength ASTM D638, Mpa	>21
Hardness, Shore D	90
Comp Modulus of Elasticity ASTM D695, Mpa	>1300
Comp Modulus of Elasticity after 24 hours, Mpa	>770
Elongation D638	2%
Coefficient of thermal expansion ASTM C531 (cm/cm/°C) x 10 ⁻⁵	3.7
Dielectric constant ASTM D150 (150KHz)	3.0
Maximum exposure temperature, °C	130
Heat deflection temperature ASTM D648, °C	80
Cure time @ 20mm, Minutes	90
Cure time to open service @ 20mm, Hours	4
Ultimate cure time @ 20mm, Hours	48

This information is supplied as an indicative reference only.
Caution should be used where direct comparisons are to be made.

SURFACE PREPARATION

Methods for substrate preparation preference using high pressure water blasting, or mechanical techniques such as grinding or scarifying.

Specialist advice is available to ensure suitable preparation procedure is employed for specific applications.

INSTALLATION

Mixing of product should be carried out using slow speed mixers and carried out by adding component "B" to the component "A".

Once uniform in colour, mixed product should be poured directly into the area requiring treatment or applied to surfaces nominated for service. In underwater service, any water within the void will be displaced vertically.

FORMWORK

In grouting applications, waxed timber, acrylic sheet, mild steel or galvanised forms have also be used with equal success.

Seal joins using silicon sealant.

COVERAGE GUIDE

As Supplied

1.7 kg of *Epigen FC4* / litre.

17 kg of *Epigen FC4* / 10 litres.

17 kg of *Epigen FC4* / m² @ 10mm.



CHEMICAL RESISTANCE

The following results represent relevance when in grouting applications of chemical facilities.

Tested at 21°C. Samples cured for 10 days at 25°C.

1 = Continuous or long term immersion

2 = Short term immersion

3 = Splash and spills

4 = Avoid contact

Acetic Acid, 10 %	2	Ammonium Chloride	1
Hydrochloric Acid, 5 %	1	Beer	1
Hydrochloric Acid, 10 %	1	Dichloromethane	4
Hydrochloric Acid, conc	2	Diesel Fuel	1
Nitric Acid, 10 %	2	Kerosene	1
Phosphoric Acid, 5 %	1	Petrol	1
Phosphoric Acid, 20 %	2	Salt Water	1
Sulfuric Acid, 5 %	2	Sewage	1
Sulfuric Acid, 20 %	3	Skydrol	1
Ammonium Hydroxide, 5 %	1	Sodium Cyanide	1
Ammonium Hydroxide, 20 %	1	Sodium Hypochlorite	1
Potassium Hydroxide, 5 %	1	Toluene	2
Potassium Hydroxide, 20 %	1	Trichloroethane	2
Sodium Hydroxide, 5 %	1	Wine	1
Sodium Hydroxide, 20 %	1	Xylene	1

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CURE

Variations in cure may arise due to the amount of material being applied, the thickness of material being applied, the surface temperature, and the product temperature. The cure may be increased by heating product or by leaving mixed material stand for 15 minutes before use. The cure may be decreased by cooling the product before mixing.

EPIGEN PRODUCTS MANUFACTURED BY **Peerless Industrial Systems Pty Ltd**

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