

HP BACKING GROUT

epigen XD030

Epigen XD030 is a controlled release product developed to provide the high performance, high temperature chemical and corrosion resistance characterised by the Epigen XD series, but additionally to provide these properties in a flowable grout based system.

In line with most heat resistant epoxy composites, heat curing is advisable to obtain maximum properties however insitu curing is acceptable.

Extremely high cross linking density after cure provides Epigen XD030 with the ability to resist a range of organic solvents including ketones and chlorinated aromatics . Also highly favoured to address hot highly corrosive acids.

A tough infusible solvent free composite system, developed for high strength polymer casting and grouting applications, Epigen XD030 maintains high structural integrity under stress in both compression and tension.

This product is designed to be used effectively with blended with graded aggregate without appreciable loss of strength. Graded aggregate is recommended when installation depth is extreme or to control excessive exotherm.

TYPICAL APPLICATIONS

Engineering Grout	Crack Repair
Floor Re Levelling	Concrete Repair
High Strength Adhesive	Casting Mould Making
Chemical Anchoring	



TYPICAL APPLICATIONS

Ratio by weight	9.1 kg Component "A"
	0.9 kg 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	>88
Tensile strength ASTM D638, Mpa	>25
Flexural strength ASTM D638, Mpa	>23
Hardness, Shore D	90
Comp Modulus of Elasticity ASTM D695, Mpa	>1300
Comp Modulus of Elasticity after 24 hours, Mpa	>770
Elongation D638	1.4%
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	>190
Heat deflection temperature ASTM D648, °C	150
Cure time @ 20mm, Minutes	90
Cure time to open service @ 20mm, Hours	5
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.

FEATURES

- Engineered for high mechanical strength
- Cures in 6 hours
- Free of all solvents - zero VOC
- Suitable for underwater use
- Resistant to organic solvents
- Versatility in application - can be used with GF
- HDT >150 Celsius - practical service beyond 200 Celsius
- Outstanding resistance to chemicals & acids

SURFACE PREPARATION

Selection of suitable techniques should be made depending on the substrate type and condition.

Specialist advice is available for specific applications.

INSTALLATION

Mixing of product shall be with slow speed mixers.

To the component "A", add component "B". Once uniform in colour, mixed product should be poured directly into the area requiring treatment. If in submerged or underwater service, any water or liquor within the void will be displaced vertically.

When filling large cavities, **Epigen XD030** may be bulk filled with equal parts by weight 16/30 mesh Silica Sand to reduce the amount of resin used. This is an advantage particularly during high ambient temperature use since the addition of aggregate reduces exotherm and any resultant post cure contraction. The addition at the recommended rate will retain strength and pourability features. Kits have been designed for equal parts aggregate addition by simply topping up the mixed product container with silica sand.

FORMWORK

In grouting applications, waxed timber, acrylic sheet, mild steel or galvanised forms can be used. Seal all joints using silicon sealant.

COVERAGE GUIDE

As Supplied

1.7 kg of *Epigen XD030* / litre.

17 kg of *Epigen XD030* / 10 litres.

17 kg of *Epigen XD030* / m² @ 10mm.

Filled with equal parts by weight 16/30 Silica Sand

0.85 kg of *Epigen XD030* + 0.85 kg of aggregate / litre.

8.5 kg of *Epigen XD030* + 8.5 kg of aggregate / 10 litres.

8.5 kg of *Epigen XD030* + 8.5 kg of aggregate / 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 %	1	Ammonium Chloride	1
Hydrochloric Acid, 5 %	1	Beer	1
Hydrochloric Acid, 10 %	1	Dichloromethane	2
Hydrochloric Acid, conc	1	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 %	1	Sewage	1
Sulfuric Acid, 20 %	2	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

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

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

ABN 14 097 615 391

79 Robinson Ave, Belmont, WA 6104

PO Box 407, Cloverdale, WA 6985

Phone: (08) 9477 3788 Fax: (08) 9477 3766

Email: service@peerlessindustrialsystems.com

www.peerlessindustrialsystems.com

www.epigen.com.au