

# HIGH ELONGATION JOINTING

## epigen 1642

Manufactured to a thick liquid viscosity, this flexible epoxy grouting & caulking system is designed for use where high elongation in concrete joint sealant applications is required due to excessive movement. Characterised by excellent toughness and durability.

Epigen 1642 possesses excellent water resistance and resistance to a broad range of chemicals including degreasers, cleaners, aviation fuels and lubricants, and a range of acid and alkali reagents.

### TYPICAL APPLICATIONS

Vehicle Workshop Jointing	Swimming Pool Joints
Carparks Jointing	PVC Pipe Sealing
Sheet Plastic Adhesive	Gasketing
Rock Wall Consolidation	Water Stop

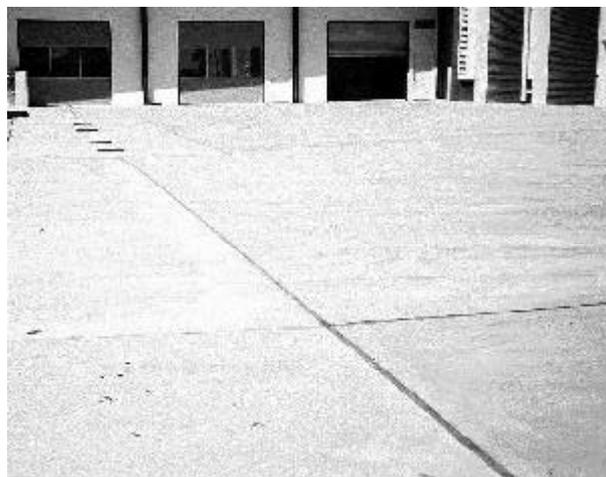
### FEATURES

- Excellent chemical resistance
- Food industry suitable
- Internally plasticized - long term stability and negligible hardening over extended periods of time
- Free of all solvents - zero VOC
- Tough and durable
- Versatility in application allows concrete patching
- Suitable with large aggregate addition enables void filling while still retaining flexibility
- Strongly adhesive for optimum adhesion

**Epigen 1642** is supplied as a two part kit comprising component "A" resin, and component "B" curative. The entire kit is supplied in a pre weighed convenient size to make on site activities easier.

Epigen 1642 is designed for use in extreme cases of joint movement. High elongation coupled with low tensile strength provides maximum movement and tolerance of peripheral factors such as shoulder weakness.

Peerless Industrial Systems can provide information on specific applications based on industry acceptable practices or historical results.



### PROFILE

Colour	Grey
Ratio by weight	3 kg Component "A" 1 kg Component "B"
Pot Life minutes @ 24°C	30
Mixed consistency @ 24°C	Non sag paste
Specific gravity when mixed	1.6

### TYPICAL CURED PROPERTIES

Compressive strength ASTM D695, Mpa	n/a
Tensile strength ASTM D638, Mpa	0.5
Flexural strength ASTM D790, Mpa	n/a
Elongation at fracture %	150
Elongation after max strain released %	6
Nominal joint movement %	50
Maximum exposure temperature, °C	100
Heat deflection temperature ASTM D648, °C	<60
Cure time to light traffic, Hours	24
Cure time to open traffic, Hours	48
Ultimate cure time, Hours	96

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

### SURFACE PREPARATION

Methods for surface preparation prior to use include using chemical means such as washing & etching, high pressure water blasting, or mechanical techniques such as abrasive blasting, grinding or scarifying. Specialist advice is available from Peerless Industrial Systems to ensure the correct preparation procedure is employed for specific application.

### APPLICATION

Mixing of product should be carried out using slow speed mixers and completed by adding to the component "A", component "B". Ensure the mix is homogenous and free from lumps.

#### Jointing:

In all cases, the maximum joint depth should be 50% of joint width. The base of the joint must be unrestrained and clear of any adhesion to the base or backing tape. In extreme conditions of joint movement, installation should be carried out to enable cure to take place at the maximum joint width. No edge primer is required to facilitate adhesion unless the surface is loose or friable. In cool environments, pre warm the product before use.

#### Adhesive Applications:

Apply a thin coat of Epigen 1642 to both surfaces before bring the two together. Do not use where a hard high strength glue line is required. Recommended where a resilient or shock resistant bond is required (eg: PVC to concrete, HDPE onto steel, Rubber onto steel). Preheat the material before use to achieve best cure rate and strength.

#### Crack Repairs: Non structural

In horizontal or vertical applications, open up cracks or chase using grinder before placing directly into crack using spatula or gun. Area of application may require top dressing as settling occurs.

### COVERAGE GUIDE

#### Jointing Application - nominally 20mm wide

"Final Depth" < or = "Twice the Joint Width"

1.6kg = 20mm X 10mm X 5 lineal metres

Backing material must release cleanly from product

#### Adhesive or Void Filling Application

1.6kg = 1 litre

1.6kg = 100mm X 100mm X 100mm

### CHEMICAL RESISTANCE

Tested at 21°C. Samples cured for 10 days at 25°C. Curing at elevated temperatures will improve chemical resistance.

- 1 = Continuous or long term immersion
- 2 = Short term immersion
- 3 = Splash and spills
- 4 = Avoid contact

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

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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

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