

# FASTPATCH ADHESIVE

## epigen FC3

**epigen**  
Performance Resins &  
Composite Systems

### TECHNICAL BULLETIN

A fast curing patching paste for repairing holes, cracks and gaps, characterized by the fibre reinforcement that allows voids to be bridged adding structural strength. Bonds to a variety of surfaces including steel, plastics, timber and fibreglass.

Extremely tough, it cures quickly to form a hard infusible plastic that resists impact and cracking.

Epigen FC3 possesses excellent water resistance and resists many harsh and aggressive chemicals including degreasers, cleaners, aviation fuels and lubricants, acid and alkali reagents.

#### TYPICAL APPLICATIONS

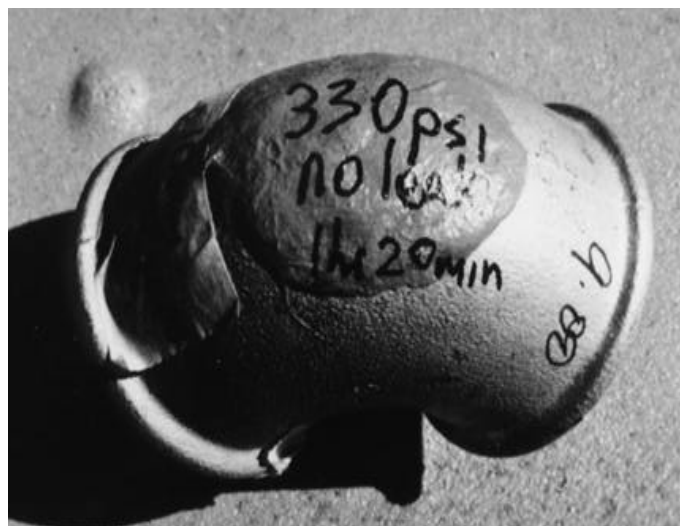
Pump and Cyclone Repairs  
Pipe and Elbow patching  
Sealing Oil Transformers  
Patching holes in boats  
Water pipe repair  
Tank patching

#### FEATURES

Fibre reinforced for strength  
Resistant to a variety of alkali & acids  
Food industry suitable  
Non sag viscosity for easy installation  
Free of all solvents - zero VOC  
Tough and durable  
Suitable on steel to patch all breaks and gaps  
Exhibits strong adhesive to plastics including PVC

**Epigen FC3** 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.

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



#### PROFILE

Colour	Green
Ratio by weight	1 kg Component "A" 0.5 kg Component "B"
Pot Life minutes @ 24°C	15
Mixed consistency @ 24°C	Paste
Specific gravity when mixed	1.4
Coverage /m <sup>2</sup> @ 10mm	14.0 kg

#### TYPICAL CURED PROPERTIES

Compressive strength ASTM D695, Mpa	82
Tensile strength ASTM D638, Mpa	24
Flexural strength ASTM D790, Mpa	36
Hardness, Shore D	>85
Elongation ASTM D638, %	0.7
Tensile Adhesion ASTM 4541, MPa	>14
Thermal conductivity ASTM C177, Kcal/m.hr° C	0.6
Coeff of Therm Exp ASTM C531, 10 <sup>-5</sup> /° C	1.5
Maximum exposure temperature, ° C	120
Heat deflection temperature ASTM D648, ° C	80
Thin Film Gel @ 6mm, Minutes	15
Thin Film Set @ 6mm, Minutes	30
Ultimate cure time, Hours	18

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**

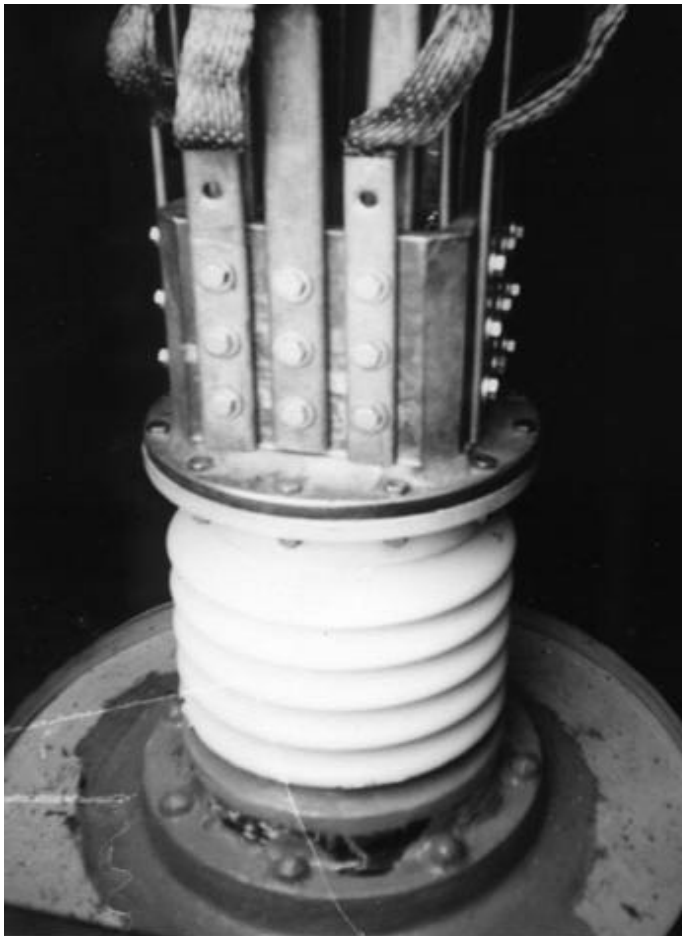
Methods for surface preparation prior to use include using chemical means such as washing & etching, high pressure water blasting, or mechanical techniques such as abrasive blasting, grinding or scarifying. Specialist advice is available from Peerless Industrial Systems to ensure the correct preparation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

**APPLICATION**

Mixing of product should be carried out using spatula, and completed by blending the component "A" with component "B". Ensure the mix is homogenous and free from lumps. The final colour shall be even green without streaks.

Smear a thin coat of Epigen FC3 to all surfaces before overlaying the paste across the entire area to complete the treatment. Do not use where a flexible or resilient glue line is required. Recommended where a tough and strong, or heavy shock resistant material is required.

In large voids, two applications may be applied to bridge the gap or lay a stick or rod to aid support of the Epigen FC3. During cure, exotherm can build up to cause sag.



**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 %	1	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	1
Nitric Acid, 10 %	2	Kerosene	1
Phosphoric Acid, 5 %	1	Petrol	1
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	1
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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