Epigrout S
High Performance, High Strength, Fluid Epoxy Grout

DESCRIPTION
Epigrout S is a two component, high performance, pre filled epoxy grout, suitable for use as a pourable or fluid grouting material. Aftek F4 and F6 fillers may be added to produce a trowellable high build mortar or a pourable flowable grout.

FEATURES
- High flow properties
- Bonds to damp substrates
- Rapid hardening and strength gain
- High chemical resistance
- Pre-measured kits make for ease of use
- High tensile and compressive strength
- 100% solid epoxy
- Excellent adhesion to most substrates
- Cures at temperatures down to 5°C
- Negligible shrinkage
- High mechanical strength
- Solvent free
- High early strength

RECOMMENDED USE
- Suitable for use on damp substrates
- Grouting heavy duty supports beneath crane and transporter rails
- Anchoring bolts, bars and fixings
- Bonding new to old concrete
- Adhesive promoter
- Filling in holes, cavities
- Repairing cracks in horizontal surfaces
- Grouting off column bases
- As a high strength repair mortar when mixed with Patchfix Filler
- As a protective coating for concrete and steel structures
- Reinforcement bar primer
- Corrosion protection on steel reinforcement prior to application of concrete repair mortar
- Grouting from 5mm to 120mm in a single application

APPLICATION INSTRUCTIONS
SURFACE PREPARATION
Clean the surface and remove dust, unsound material, plaster, oil, paint, grease, corrosion deposits or algae. Roughen the surface and remove laitance and expose aggregate by light scabbling and grit blasting. Oil and grease deposits should be removed by steam cleaning, detergent scrubbing or the use of proprietary degreaser. All residual ponding water must be removed; the substrate may be moist but not wet. All anchor bolt holes must be free from water and debris prior to placing of Epigrout S. Steel surfaces such as reinforcement bars should be grit blasted or scabbled to remove any corrosion.

MIXING
The mix ratio is 4:1 by volume, 4 parts Part A and 1 part Part B by volume. Any steel reinforcement and formwork should be prepared, cut to size and shape and made ready for assembly before mixing commences. Care should be taken to ensure that Epigrout S is thoroughly mixed. The hardener and base components should be stirred separately before mixing to disperse any settlement. The entire contents of the hardener (Part B) tin should then be poured into the base (Part A) tin and the two materials thoroughly mixed using a suitable slow speed drill and high shear mixing paddle. Mix for 2 minutes until fully uniform colour is obtained, the sides of the tin should be scraped, mixing should continue for a further 2 minutes. To facilitate mixing and application at temperatures below 10°C, the separate components should be warmed in hot water up to a maximum temperature of 25°C before beginning to mix. If heated to 25°C, the subsequent mixed material will need to be used more speedily as the pot life will be reduced. Alternatively, the material should be stored in an environment controlled to 20°C and only removed immediately before use.

Do not attempt to rework or re-temper any partially set product. NB: Liquid epoxy grout will be exotherm and set prematurely if not used within the pot life.
APPLICATION INSTRUCTIONS

APPLICATION BY POURING INTO FORMWORK
This method is commonly used for base plate installation where intimate contact between the grout and base plate is essential to the operation of the equipment being installed. Ensure the formwork is liquid tight before by testing with water where possible, allow for provision of drain plugs to remove all water prior to grouting. Use silicone sealant or other mastic to seal up the joints in the boxing. See typical formwork detail below –

Place the mixed Epigrout S in the reservoir and maintain the level of liquid by topping up the grout. Do not allow the level in the header box to fall below the bottom of the base plate. Ensure all formwork, shims etc., are greased or coated with Stripfoam prior to grouting. NB: Hardening grout can only be removed by grinding.

Epigrout S is suitable for pumping. Where Epigrout S is used as an anchoring grout, it may be poured or pumped directly into the prepared hole in the concrete prior to placing the fixing.

COVERAGE
One litre will cover 1m² at 1mm thick. Epigrout S can be used as an epoxy bonding agent for new and old concrete the coverage rate is 4-5m² / litre.

IMPORTANT NOTES
Epigrout S when mixed in large volumes, greater than 10 litres is highly likely to cure faster reducing the pot life of the mixed material in the tin.

Low temperature working: the minimum application temperature is 5°C. In temperatures below 10°C, the separate components should be heated in warm water (up to 25°C) or stored in a temperature controlled environment for 12 hours before use. These measures will facilitate mixing and application. Normal precautions for winter working with epoxy materials should be adopted.

At ambient temperatures above 30°C, the material should be stored in the shade or in an air-conditioned environment 12 hours before use.

Do not dilute Epigrout S with solvent as this will severely affect the ultimate performance of the product.

Only mix as much Epigrout S that can be used within the lot life.
TECHNICAL DATA SHEET

Epigrout S

High Performance, High Strength, Fluid Epoxy Grout

PROPERTIES
Typical properties after 7 days cure at 25°C and 50% RH.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Compressive strength</td>
<td>119MPa</td>
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<tr>
<td>Solid content by weight</td>
<td>100%</td>
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<tr>
<td>Heat distortion temp</td>
<td>80°C approx.</td>
</tr>
<tr>
<td>Chemical resistance</td>
<td>Very good</td>
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<tr>
<td>Tensile strength (flexural)</td>
<td>30MPa approx.</td>
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<tr>
<td>Modulus of elasticity</td>
<td>14GPa</td>
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<tr>
<td>Service temperature</td>
<td>-10°C to +65°C</td>
</tr>
<tr>
<td>Pot life</td>
<td>25 – 30 mins at 25°C</td>
</tr>
<tr>
<td>Mix ratio</td>
<td>4:1 (part A:B) by volume</td>
</tr>
<tr>
<td>Max. application temp.</td>
<td>35°C</td>
</tr>
<tr>
<td>Water absorption*</td>
<td>&lt;0.2% (10 days at 25°C)</td>
</tr>
<tr>
<td>Slant shear bond strength</td>
<td>40MPa (substrate failure)</td>
</tr>
</tbody>
</table>

Tested to AS1478.2

EPIGROUT S CURE TIME AT INCREASING TEMPERATURES
Results based on 40 x 40mm cubes
*Epigrout S conditioned to 20°C prior to mixing*

<table>
<thead>
<tr>
<th>Temp °C</th>
<th>1 hour compressive strength MPa</th>
<th>2 hours compressive strength MPa</th>
<th>3 hours compressive strength MPa</th>
<th>4 hours compressive strength MPa</th>
<th>5 hours compressive strength MPa</th>
<th>6 hours compressive strength MPa</th>
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<tbody>
<tr>
<td>10</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>15</td>
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<tr>
<td>15</td>
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<td>87</td>
<td>104</td>
<td>110</td>
<td>114</td>
</tr>
</tbody>
</table>

STORAGE AND SHELF LIFE
Store below 35°C and 5°C. Shelf life is 2 years in original unopened container.

CLEAN-UP
Clean up uncured material and equipment immediately after use using Epilox Thinners. Do not use solvent on skin. Cured Epigrout S is difficult to remove via chemical means and mechanical means may be necessary.

PACKAGING
Epigrout S is available in 3 litre and 15 litre kits. Item No 222075 (15 litre), 221035 (3 litre kit)

FIRE
Epigrout S is non flammable.