

## EUNITILE G EM5

Epoxy based tile grout



### Product Description

EUNITILE G EM5 is a three part epoxy tile grout. based on a solvent free resin system filled with high quality quartz fillers for maximum chemical resistance and adhesion. It is available in water wipeable (Standard) or high chemical resistant grade (CR).

### Uses

EUNITILE®G EM5 is used primarily as bedding and jointing mortar for fixing acid resistant bricks, tiles, paving and channel blocks. Other uses include jointing stoneware pipes, fixing machinery bolts and all areas requiring high structural and bond strength. Combined with good all round chemical resistance.

### Advantages

- Excellent chemical resistance
- Suitable for use in wet and cool cure conditions
- High bond strength to most building materials
- Excellent mechanical properties
- Three components pack allowing flexibility in use

### Typical Properties

**Appearance:** Buff coloured mortar

**Specific Gravity:** 1.8 at 20°C

**Consistency:** Thixotropic

**Shelf Life:** 12 months in unopened containers

**Mix Ratio:**

Standard: 4:1 filler: resin mix by parts

**Pack Size:**

Standard: 5 kg

### Application

**Coverage:**

**Jointing:** 3 metre run of 10 mm x 20 mm joint per kg mixed product.

**Bedding:** 5.4 kg per square metre at 3 mm thick.

**Notching:** 3.5 kg per square metre at 3 mm thick

<b>Pot Life</b>	<b>10°C</b>	<b>20°C</b>
<b>Foot Traffic</b>	<b>90min</b>	<b>45min</b>
<b>Full Chemical Resistance</b>	<b>24 hours</b>	<b>6hours</b>
<b>Service:</b>	<b>14days</b>	<b>3 days</b>

Compressive Strength BS6319. Part 2  
72 N/mm<sup>2</sup>

Flexural Strength BS6319. Part 3  
35 N/mm<sup>2</sup>

Tensile Strength BS6319. Part 7  
16 N/mm<sup>2</sup>

Bond Strength to Wire  
Cut Brick/Direct Tensile  
4.2 N/mm<sup>2</sup>

Coefficient of Expansion  
14.4 x 10<sup>-6</sup> per °C

Service Temperature Limit  
95°C

### Chemical Resistance

Typical data against solutions at 20°C for 90 days are given below. For other chemicals and conditions consult the Technical Department. The chemical resistant grade has excellent resistance to inorganic acids. and full data are available from the Technical Department.

Solution	EUNITILE G EM5
Caustic soda 30%	G
Sulphuric acid 10%	G
Trichloroethane	P
Fruit juice	G
Kerosene	E
Hexane	G
Hydrochloric acid 10%	G
Bleach	E

Phosphoric acid 10%	G
Fueloil	E
Methylethyl ketone	P
Glycol ether	D

#### Key

E= Excellent. no change

G=Good. slight attack

P= Poor, heavy attack

D= Destroyed

### Method of Use

#### Surface Preparation

The substrate should be clean, sound and free from oil, grease and other contaminants.

Laitance should be removed by wire brushing, sand blasting etc. EUNITILE G EM5 will bond concrete which is not moisture free, but best results are obtained with dry substrates. When applying EUNITILE G EM5 to a moisture containing substrate, allowance must be made for the subsequent evaporation of residual water vapour.

#### Mixing and Application

EUNITILE G EM5 is supplied as a 3 component pack are resin, hardener and powder components. Blend resin and hardener packs together thoroughly before adding the filler component. The mix ratio of the liquid is critical and should not be altered. The powder addition can be varied to give the handling properties required, depending upon the substrate, temperature and application method. Filler: resin ratios from 4:1 can be used without affecting the mechanical properties. Working time with EUNITILE G EM5 is limited to 45-50 minutes and only sufficient material should be mixed which can be used within this period. Once mixed, spread thinly on polythene sheeting to prevent heat buildup and to extend the pot life. Before setting EUNITILE G EM5 can be removed from tiles, bricks using water. Use EUNITILE G EM5 in both cases to clean tools and equipment.

#### Handling

As with all epoxy resins, work cleanly at all times. Skin and eye contact should be prevented by the use of plastic or rubber gloves, barrier creams, eye protection and protective clothing. Any resin or hardener in contact with the skin should be removed with warm, soapy water and resin removal cream NOT solvents. In case of eye contact. wash copiously with water and in case of

In case of eye contact. wash copiously with water and in case of ingestion, obtain immediate medical attention. EUNITILEG EM5 is a combustible material and good ventilation is essential in the work area. Do not smoke or epoxy to anaked flame during use and store in closed containers. For full details consult the EUNITILE G EM5 Health and Safety instructions.

#### Storage

Store in closed containers, protected from extremes of temperature. Ideally the product should be stored at a temperature between 15°C-25°C during application. About 24 hours before use, store in an area suitable for achieving this.

#### Technical Service

The Technical Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

#### Health and Safety

For further advice see them EUNITILE G EM5 Material Safety Data Sheet, or consult European Concrete Additives.

#### Packaging

Supplied in 5kg Kits

#### Contact Information

Al-Faiha for Engineering Products  
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