



Product Data Sheet  
Edition 07.2008  
Identification No. GA - 4



## KEMGROUT EP

Non-shrink, Free flow epoxy grout

### Description

**KEMGROUT EP** is a solvent free, 3 component epoxy resin based product designed for Non-shrink, free flow grouting of gap width from 10mm. and over.

### Where to use

For free flow grouting where the mechanical properties and chemical resistance of the hardened grout must be of the highest order.

Applications include heavy duty support beneath crane and transporter rails, high speed turbines and centrifuges, drop forges, reciprocating machinery and other operating or test equipment subjected to heavy dynamic or mobile loads.

### Advantages

- High flexural strength and adhesion to substrate ensure excellent performance under dynamic operating conditions.
- Simple mixing and free flowing features followed by high early strength.
- Withstands attack of a wide range of chemicals, acids and alkalis.
- Excellent mechanical properties ensuring durability and long term service.
- Materials designed for low creep characteristics under sustained loading.
- Pre-weighed ready to use packing to facilitate site mixing.
- Vibration damping effect protecting the concrete foundation from cracking.

### Properties

Flow characteristics at 100 mm head and 20°C

Gap width, mm	10	40	70
Maximum flow distance, mm	800	1500	1900

Mechanical Properties: At 20°C, in 7 days

Property	Standards	Result N/mm <sup>2</sup>
Compressive strength	BS 4551,ASTM D695	80-90
Ultimate flexural strength	BS 6319	30-35
Ultimate tensile strength	BS 12	15-18
Ultimate young's modules (static )		15000
Shrinkage	ASTM C827	NIL
Linear coefficient of expansion	ASTM C531	34x10 <sup>-6</sup> /°C
Specific gravity		2
Pot life at 23°C	1 hours	
Bond strength	Excellent to concrete, brick and steel	
Max., thickness per application	5 cm at 20°C	
Water absorption		>0.5%

### How to use

#### Substrate preparation:

**Concrete surface:** Must be free from oil, grease, or any loosely adhering material, if the concrete surface is defective or has latency, it must be cut to a sound base. Bolt holes or fixing pockets must be blown clean of any dirt debris.

- All rust traces must be removed either by mechanical means (e.g. abrasives) or by a suitable rust remover (e.g KEMKLEEN).
- The undersides and edges of steel plate should then be cleaned from oil and dirt then protected with KEMPRIM M to prevent rust formation and ensure bonding with the KEMGROUT EP.

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**Mixing & placing:**

- Mixing of KEMGROUT EP should be carried out as follows:
- The entire contents of part B (hardener) should be poured into part A (base) and mixed until homogenous colour is obtained.
- Place the mixed resin and hardener into a suitable mechanical mixer making sure that the entire volume is poured in.
- Add the aggregate and mix for 2-3 minutes or until uniform color is achieved and the mix should be poured within the pot life.
- Sufficient amount of grout must be available prior to starting and the time taken to pour a batch must be regulated to the time taken to prepare the next one.
- Pouring should be from one side of the void to eliminate the entrapping of air.

**Exothermic:**

The temperature rise developed in the mixed grout is a function of the volume to surface area ratio, the ambient temperature, the mass and thermal conductivity of surrounding material.

**Cleaning:**

Tools can be cleaned with a suitable solvent (e.g. xylene) to remove the non cured mortar.

**Theoretical Coverage:**

2 kg/ m<sup>2</sup>/ mm thick.

**Packaging:**

10 kg (A+B+C)

**Storage:**

KEMGROUT EP has a shelf life of 12 month in recommended conditions

**Health and Safety**

- Some people are sensitive to epoxy resin so gloves and a barrier cream should be used when handling these products.
- If contact with the resin occurs, it must be removed before it hardens with soap and water.
- Do not use solvents, the use of goggles is recommended but if accidental eye contamination occurs, wash thoroughly with plenty of running water and seek medical treatment immediately.

**Additional Information****Additional Information**

PROKEM provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure.

PROKEM designs tailor made products when there is critical applications that require specific requirements.

For our customer's satisfaction, PROKEM extends technical services to include after sales support to assist users in a proper handling of our products.