

Kemgrout EP

Non-Shrink, Free Flow Epoxy Grout

Description	Kemgrout EP is a solvent-free, 3 components epoxy resin-based product designed for Non-shrink, free-flow grouting of gap width from 10mm. and over. Kemgrout EP reduces possible shrinkage effects yet develops high compressive strength.		
Where to use	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 and waterproof. • 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: @ 20 °C, in 7 days			
Compressive strength	75-80 N/mm ²	National Research Center	
Ultimate flexural strength	30 - 35 N/mm ²		
Ultimate tensile strength	15 - 18 N/mm ²		
Ultimate Young's modules (static)	15000 N/mm ²		
Shrinkage	NIL		
Linear coefficient of expansion	34x10 ⁻⁶ / °C		
Specific gravity	2		
Pot life @ 23 °C	1 hour		
Bond strength to concrete,	4 N/mm ²		
Bond strength to steel	20 N/mm ²		
Max., thickness per application	5 cm @ 20 °C		
Water absorption	Nil		

Surface Preparation	<ul style="list-style-type: none"> • 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 the steel plate should then be cleaned from oil and dirt's then protected with Kemprim M to prevent rust formation and ensure bonding with the Kemgrout EP.
Mixing	<p>Mixing of Kemgrout EP should be carried out as follows:</p> <ul style="list-style-type: none"> • The entire contents of part B (hardener) should be poured into part A (base) and mixed until homogeneous Color 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 a uniform color is achieved. • Allow mixed grout to stand for 2 minutes prior to placing to allow entrained air from mixing to be released. • The mix should be poured within the pot life .
Application	<ul style="list-style-type: none"> • Sufficient amount of grout must be available prior to the start 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. • Where further mixes are required to fill the void, maintain a continuous pouring.
Theoretical coverage	2 kg/ m ² /mm thick..
Packaging	10 & 40 Kg (A+B+C).
Shelf life & Storage	Kemgrout EP has a shelf life of 12 months in recommended conditions.
Cleaning	Tools can be cleaned with a suitable solvent (e.g. xylene) to remove the non-cured mortar.
Exothermic	The temperature rise developed in the mixed grout is a function of the volume-to-surface area ratio, the ambient temperature, and the mass and thermal conductivity of surrounding material.
Health and Safety	<ul style="list-style-type: none"> • 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	<p>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.</p> <p>PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range. For our customer's satisfaction.</p> <p>PROKEM reserves the right to change the properties of its products.</p> <p>All orders are accepted subject to our current term of sale & delivery.</p> <p>Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request.</p> <p>PROKEM extends technical services to include after-sales support to assist users in the proper handling of our products.</p>