

Kemgrout MC

Flowable, Micro Concrete, Non-Shrink Grout

Description	Kemgrout MC is a free-flowing, one-component, cement-based micro-concrete modified with aggregate, fillers, micro silica, and other selected additives. It is suitable for use in hot climates. Kemgrout MC can be pumped, poured, or troweled for large confined areas of concrete repair and heavy-duty applications beneath base plates, plinths, and stanchion bases. Standards: It complies with ASTM C580,191, C230, and BS 1881.	
Where to use	It is designed for use in both grouting and repair of concrete as in: <ul style="list-style-type: none">• Casting structural elements with too large volumes• Grouting for too small and inaccessible areas• Steel structures• Turbines, generators & heavy machinery• Foundations & bearing plates• Crane rails and machine base plates	
Advantages	<ul style="list-style-type: none">• Non-corrosive, non-chloride and• Non-metallic• Non-shrink• High ultimate strengths and low permeability of cured repair• Highly fluid to allow for placement without vibration• Low permeable and excellent adhesion• Easy to mix and apply• Economical• Can be pumped at a flowable• consistency• Self-compacted• Good flow characteristics	
Properties		
Form	Grey powder	
Wet Density	2300 kg/m ³	
Coefficient thermal of expansion	11x10 ⁻⁶ / °C	
Mechanical Properties after 28 days @ 25°C		
Compressive Strength	45 – 50 N/mm ²	ASTM C109
Flexural Strength	8 – 9 N/mm ²	ASTM C580
Bond Strength	2.5 – 3 N/mm ²	
Modulus of elasticity	315 N/mm ²	
Liner shrinkage	0.135%	ASTM C531

Surface Preparation	<ul style="list-style-type: none"> • Concrete substrates should be sound, clean, and free from oil, grease, laitance, and all loose matters • Saturating absorbent substrates with water and any remaining water should be removed • Metal substrates should be free from rust, scale, and other impurities • Expansion Joints: Shall be installed in accordance with local building codes • Never bridge an expansion, contraction, or construction joint
Mixing	<ul style="list-style-type: none"> • Empty the dry mix into a suitable mixer containing the specified amount of clean, potable water • Mix with a low-speed drill (300 – 500 rpm) until a smooth, homogeneous consistency is obtained (mixing time 2 – 3 minutes) • Do not mix manually • It's recommended to use cold water to control heating during pouring of large volume, of Kemgrout MC • Fresh Kemgrout MC mixture should not be exceeding 30° C • Mixing ratio: 2.5 – 3 liters of clean potable water / 25 Kg bag
Application	<ul style="list-style-type: none"> • Wet the substrate with water prior to application • Allow the grout to stand for 2 – 3 minutes before use to allow entrapped air to escape • Place the grout within 20 minutes after mixing • Kemgrout MC is applied in a layer of thickness 50 mm to 500 mm when applied under crane rails & machine base • Larger pours can take place in confined areas, always monitor the mixture temperature • Maintain sufficient hydrostatic head of at least 15 cm in order to keep the product flowing
Theoretical coverage	2300 kg/m ³
Packaging	25 Kg bags
Shelf life & Storage	12 months if stored in its original & unopened packs in proper conditions
Cleaning	Should be removed from tools and equipment immediately after use with clean water
Curing	Exposed surfaces should be treated with a curing agent Kemcure or any other approved method as polyethylene sheets or wet hessian
Health and Safety	<ul style="list-style-type: none"> • Kemgrout MC is non-toxic if comes in contact with skin • Use gloves to avoid contact with skins • If skin comes in contact, wash immediately with soap and water • Eye contamination must be immediately washed with water • Do not breathe dust, Use a practical mask
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 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>