

# Kemgrout MC

Flowable, Micro Concrete, Non-Shrink Grout

**Kemgrout MC** is a free-flowing, one-component, cement-based micro-concrete modified with aggregate, fillers, micro silica, and other selected additives.

## Description

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.

## It is designed for use in both grouting and repair of concrete as in:

- 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

## Where to use

- 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 <sup>3</sup>	
Coefficient thermal of expansion	11x10 <sup>-6</sup> / °C	
<b>Mechanical Properties after 28 days @ 25°C</b>		
Compressive Strength	45 – 50 N/mm <sup>2</sup>	ASTM C109
Flexural Strength	8 – 9 N/mm <sup>2</sup>	ASTM C580
Bond Strength	2.5 – 3 N/mm <sup>2</sup>	
Modulus of elasticity	315 N/mm <sup>2</sup>	
Liner shrinkage	0.135%	ASTM C531



Surface Preparation	<ul style="list-style-type: none"> <li>Concrete substrates should be sound, clean, and free from oil, grease, laitance, and all loose matters</li> <li>Saturating absorbent substrates with water and any remaining water should be removed</li> <li>Metal substrates should be free from rust, scale, and other impurities</li> <li>Expansion Joints: Shall be installed in accordance with local building codes</li> <li>Never bridge an expansion, contraction, or construction joint</li> </ul>
Mixing	<ul style="list-style-type: none"> <li>Empty the dry mix into a suitable mixer containing the specified amount of clean, potable water</li> <li>Mix with a low-speed drill (300 – 500 rpm) until a smooth, homogeneous consistency is obtained (mixing time 2 – 3 minutes)</li> <li>Do not mix manually</li> <li>It's recommended to use cold water to control heating during pouring of large volume, of <b>Kemgrout MC</b></li> <li>Fresh <b>Kemgrout MC</b> mixture should not be exceeding 30° C</li> <li>Mixing ratio: 2.5 – 3 liters of clean potable water / 25 Kg bag</li> </ul>
Application	<ul style="list-style-type: none"> <li>Wet the substrate with water prior to application</li> <li>Allow the grout to stand for 2 – 3 minutes before use to allow entrapped air to escape</li> <li>Place the grout within 20 minutes after mixing</li> <li><b>Kemgrout MC</b> is applied in a layer of thickness 50 mm to 500 mm when applied under crane rails &amp; machine base</li> <li>Larger pours can take place in confined areas, always monitor the mixture temperature</li> <li>Maintain sufficient hydrostatic head of at least 15 cm in order to keep the product flowing</li> </ul>
Theoretical coverage	2300 kg/m <sup>3</sup>
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 <b>Kemcure</b> or any other approved method as polyethylene sheets or wet hessian
Health and Safety	<ul style="list-style-type: none"> <li><b>Kemgrout MC</b> is non-toxic if comes in contact with skin</li> <li>Use gloves to avoid contact with skins</li> <li>If skin comes in contact, wash immediately with soap and water</li> <li>Eye contamination must be immediately washed with water</li> <li>Do not breathe dust, Use a practical mask</li> </ul>
Additional Information	<p><b>PROKEM</b> 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><b>PROKEM</b> 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><b>PROKEM</b> reserves the right to change the properties of its products.</p> <p>All orders are accepted subject to our current term of sale &amp; 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><b>PROKEM</b> extends technical services to include after-sales support to assist users in the proper handling of our products</p>