**PRODUCT DESCRIPTION**

Mapegrout I is a powdered expanding, water reducing and stabilising additive for cement and mortar.

Mapegrout I is used to improve the workability, in particular the pumpability and to counteract the sinking caused by plastic settling which occurs prior to setting.

Mapegrout I is used for the injection of cable ducts, prestressed concrete, grouting concrete and in sealing mortar etc.

**TECHNICAL CHARACTERISTICS**

Mapegrout I is a powder consisting of water reducing compounds, bentonite as a stabilising component and aluminium powder as the expanding agent.

The amount of water required is reduced by 10 - 15 %, workability and in particular pumpability is improved. Bleeding and the risk of segregation and blocking are reduced. The expanding component causes a controlled expansion in grout and concrete during the plastic phase. This technology secures the process of filling the total desired volume with grout or concrete. The expansion creates micro pores which improve the frost resistance, especially with shorter setting times at low temperatures. Improved encasing of anchorage points and cables ensures good corrosion protection.

Mapegrout I has a slightly retarding effect on the setting, thus the improved workability and pumpability are maintained over longer periods.

**WORKING INSTRUCTIONS**

**Injection of cement (grout):**

5 - 25 litres of water, according to flow requirements, are poured into the mixer. Start mixing and add one sack (20 kg) of cement followed by approx. 1 kg Mapegrout I. Finally add another sack of cement and continue mixing until homogenous, minimum 3 minutes.

**Mortar**

The amount of Mapegrout I to be added is determined by tests based on the ratio between cement and sand, consistency and requirements for expansion.

Mapegrout I can be spread onto the sand or mixed into the dry cement and then added to a mortar mixer. Mixing time 4 - 5 minutes.

**Casting and Injection**

The mixture should be kept in motion e.g. by use of an activator while the injection work proceeds. The mixture should be placed no later than 45 min. after mixing or expansion capabilities will be reduced. At lower temperatures, close to 0°C, fast setting cement should be used.

**DOSAGE**

Normal dosage of Mapegrout I is 1 % of cement by weight. The amount may be adjusted (0.5 - 2 %) according to requirements of expansion, flow etc.
## TECHNICAL DATA (typical values)

### PRODUCT IDENTITY

<table>
<thead>
<tr>
<th>State</th>
<th>powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>light grey</td>
</tr>
<tr>
<td>Chloride content, %</td>
<td>&lt; 0.05</td>
</tr>
</tbody>
</table>

### Storage

Stored frost free in unopened packaging, product properties remain unchanged throughout the first 12 months.

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### PACKAGING

Mapegrout I is available in 15 kg buckets (0.5 kg bags x 30) and 20 kg bags. The product has a minimum shelf-life of 1 year when stored in a dry place in unopened original packaging.

### SAFETY INSTRUCTIONS FOR PREPARATION AND USE

Mapegrout I is not considered dangerous according to European regulations regarding classification of chemicals. It is recommended to wear gloves and goggles and to take usual precautions for handling of chemicals.

For further and complete information about safe use of our product, please refer to our latest version of the Safety Data Sheet.

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### NOTE

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the technical data sheet, available from our web site www.mapei.com

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All relevant references for the product are available upon request and from www.mapei.com