

Mapegrout Compact

Pre-mixed injecting grout characterized by great resistance to wash-out and controlled rheology and fluidity

DESCRIPTION

Mapegrout Compact is a pre-mixed product based on cement, special hydraulic binders (with high chemical resistance and pozzolanic activity) and admixtures according to a formulation developed in MAPEI Laboratories.

The particular components of **Mapegrout Compact** make the product, once mixed with water, extremely cohesive and resistant to the wash-out action carried out by water, even in pressure.

After adding the water, according to the amounts specified in the Technical Data Sheet,

Mapegrout Compact gives origin to a product characterized by great pumpability properties, without risks of clogging the lines.

The grout, once mixed, develops constantly the mechanical strengths and reaches, after 28 days, more than 10 N/mm² of compressive strength.

Finally, the mix is characterized by:

- absence of wash-out of cement and other fine particles;
- great cohesion;
- high pumpability;
- volumetric stability and absence of segregation;
- constant development of mechanical strength;

- great compactness.

WHERE TO USE

Mapegrout Compact is an anti wash-out cementitious mix. Therefore, it is specially formulated for:

- repair of underwater concretes;
- filling of the annular space behind the concrete lining in tunnels excavated with Tunnel Boring Machines (secondary grouting), even in presence of underground moving water or water in pressure.

HOW TO USE

Product preparation

Mapegrout Compact is a pre-mixed ready-to-use product. Before its use, it must be mixed only with water.

The water to be added is the 30% in weight by the weight of the powder. Therefore, for every 20 kg bag of **Mapegrout Compact**, it is necessary to add 6 litres of water.

It is strongly advisable not to modify the amount of water suggested. This would change all the already mentioned properties of the product.

Then mix for some minutes, until achieving a homogeneous free of lumps product.

Product application

The mix can be pumped with all the traditional equipments for concrete, generally used in the job-sites.

TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Consistency:	powder
Colour:	grey
Apparent volume mass (EN 1015-6) (kg/m³):	880 ± 50
Solid content (%):	100
Storage:	12 months in dry and unopened packaging
Hazard classification according to EC 1999/45:	irritant. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet
Customs class:	3824 50 90
APPLICATION DATA (at +20°C and 50% R.H.)	
Amount of water to be added:	30% on weight by weight of powder
Amount of water to be added per 20 kg bag (l):	6
Volume mass of the mix (kg/m³) (EN 1015-6):	1880 ± 30
Fluidity (EN 12350-2):	S5
Final performances at +20°C and 95% R.H. Compressive strength (EN 196/1) (N/mm²):	
– after 1 day:	≥ 0.5
– after 7 days:	≥ 5
– after 28 days:	≥ 10

The service of Technical Assistance of the **Underground Technology Team** is at your complete disposal for evaluating the most proper way to apply the **Mapegrout Compact**.

Cleaning

Due to its high cohesion, the product is very sticky on the mixers and the other equipments used for pumping. Therefore we suggest to clean them when the product is not hardened yet. After hardening, the cleaning becomes more difficult and can be carried out only with mechanical ways.

CONSUMPTION

The consumption of **Mapegrout Compact**

is approximately 1.32 kg of product per dm³ of empty space to be filled.

PACKAGING

Mapegrout Compact is available in 20 kg bags.

STORAGE

Store the **Mapegrout Compact** for maximum 12 months in a covered and dry place in its original packaging. Protect from frost.

The product complies with the conditions of Annex XVII to Regulation (EC) N° 1907/2006 (REACH), item 47.

SAFETY INSTRUCTIONS FOR THE PREPARATION AND APPLICATION

Mapegrout Compact contains cement,

that, in contact with sweat or other bodily fluids produces an irritant alkaline reaction and allergic reaction to those predisposed. Wear protective gloves and goggles. For further and complete information about a safety use of our product please refer to our latest version of the Material Safety Data Sheet.

FOR PROFESSIONAL USERS.

WARNING

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

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

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