



# Mapedrain 1K Grout

**Single component, ready-to-use polybutadiene-based drainage mortar for grouting paved floors with joints at least 5 mm wide in light duty installations**



## WHERE TO USE

Grouting all types of internal and external paved floors (klinker, cement-based composites, porphyry slabs and blocks, etc.) subject to light traffic.

### Some application examples

**Mapedrain 1K Grout** is used to create a drainage grouting mortar for use on paved surfaces subject to low intensity stresses, such as:

- steps, pavements and terraces laid directly on the ground for domestic use;
- courtyards and pedestrian entrances, including vehicle entrances, subject to light traffic;
- residential drives and pavements subject to pedestrian traffic;
- public roads and squares.
- terraces and balconies with the following construction: sloping layer (minimum 2%), waterproofing layer, isolating drainage screed with a thickness of at least 5 cm made from **Mapedrain Mortar**, and a finishing layer of ceramic or stone laid using **Elastorapid** or **Granirapid**.

## TECHNICAL CHARACTERISTICS

**Mapedrain 1K Grout** is a single component, ready-to-use quartz, air-drying sand and polybutadiene-based mortar with special admixtures.

**Mapedrain 1K Grout** forms a very good bond with the edges of the slabs and hardens quickly, to develop high wear resistance, good mechanical strength and excellent drainage properties. The characteristics of **Mapedrain 1K Grout** make the grouted joints particularly resistant to high-pressure hydro-cleaning and de-icing salts.

Thanks to its permeability, rainwater penetrates quickly into the substrate without leaving puddles on the surface.

**Mapedrain 1K Grout** is resistant to freeze/thaw cycles and adverse weather conditions and is suitable for both internal and external applications. Also, thanks to its special properties, grout made using **Mapedrain 1K Grout** is resistant to the formation of weeds and moss and is not washed away over the years, which makes maintenance easier and more cost effective compared with conventional grout.

## RECOMMENDATIONS

- **Mapedrain 1K Grout** must not be either manually or mechanically compacted: if the product is compacted, its capacity of dispersing rainwater and of drainage will be reduced.
- Do not lay the product if it is about to rain or if it will be continuously exposed to sunlight, unless some form of protection is employed.
- Do not apply the product if the temperature is lower than +8°C or higher than +30°C.

# Mapedrain 1K Grout



Applying the product  
with a rubber squeegee



Cleaning of the grouted  
surface with a broom

## TECHNICAL DATA (typical values)

### PRODUCT IDENTITY

|   |   |
|---|---|
| <b>Consistency:</b>                                   | thick paste   |
| <b>Colour:</b>  | grey, sand and anthracite   |
| <b>Density (g/cm³):</b>                               | 1,6   |
| <b>Dry solids content (%):</b>                        | 100   |
| <b>Storage:</b>                                       | 12 months in its original, closed containers  |
| <b>Hazard classification according to EC 1999/45:</b> | none.<br>Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet |
| <b>Customs class:</b>                                 | 3824 50 90  |

### APPLICATION DATA (at +23°C and 50% R.H.)

|   |                    |
|---|--------------------|
| <b>Pot life:</b>                                  | 45 minutes         |
| <b>Recommended application temperature range:</b> | from +8°C to +30°C |
| <b>Set to light foot traffic:</b>                 | 24 hours           |
| <b>Ready for use:</b>                             | 7 days             |

### FINAL PERFORMANCE FIGURES

|  |    |
|--|----|
| <b>Flexural strength<br/>– after 28 days (N/mm²):</b>    | 5  |
| <b>Compressive strength<br/>– after 28 days (N/mm²):</b> | 12 |

- Do not use **Mapedrain 1K Grout** if the substrate on which the floor is to be laid is not a drainage type.
- Do not use **Mapedrain 1K Grout** to grout special paved drainage floors, the product may reduce the permeability of the slabs.
- Do not mix **Mapedrain 1K Grout** with solvents or with other products.
- After applying the mortar, stains may appear on the surface of the slabs or their colour may be altered if they are not treated with **Mapedrain EasyClean**. However, these effects will be worn away with use and due to the action of adverse weather conditions.

## APPLICATION PROCEDURE

### Preparation of the substrate

The substrate on which the floor is to be laid must be of the drainage type, and suitable to withstand the loads foreseen.

The substrate must be solid enough to ensure that permanent loads or pools of water do not cause it to subside. The floor must be laid according to careful laying techniques, so that the tile joints are not damaged once they have been completed.

### Preparation of the joints

The joints must be carefully cleaned and raked out before grouting. They must be at least 5 mm wide and 30 mm deep. If the joints are wider than 15 mm, they must be at least twice as deep, otherwise the **Mapedrain 1K Grout** grout mix may not penetrate down through the entire thickness and leave voids. After freeze-thaw cycles, water which remains in these voids may cause fracture of the joints.

If the product is used to repair the grout of an old slab, the joints must be emptied beforehand and the surfaces and edges must be carefully cleaned.

The surface to be grouted must be dry.  
To avoid the formation of stains or alterations in the colour, treat the surface of the floor with **Mapedrain EasyClean** before starting grouting operations.

### Application

**Mapedrain 1K Grout** is ready-to-use. After opening the package, remove the protective film and pour the mix on the surface to be grouted. Apply **Mapedrain 1K Grout** on the surface of the slabs and in the joints using a rubber trowel or rake, making sure that the joints are completely filled. If the joints are narrow, the grout may fall out and will have to be applied again.  
Within 45 minutes of applying **Mapedrain 1K Grout** grout, clean any product residue from the surface of the slabs with a broom.  
Do not manually or mechanically compact the product into the joints to avoid its drainage capacity being reduced.  
Protect the joints from rain and dust for at least 24 hours after grouting.  
After 7 days, and in all cases once the product has hardened, clean the grouted surface with high pressure water jets.

### SET TO LIGHT FOOT TRAFFIC

The grouted surface may be stepped on after 24 hours (at +23°C and 50% relative humidity). These times may vary according to the ambient temperature.

### READY FOR USE

The surfaces may be put into service after 7 days (at +23°C and 50% relative humidity).

### Cleaning

Tools and containers may be cleaned while the product is still fresh using plenty of water. Once **Mapedrain 1K Grout** grout has set, they may only be cleaned mechanically.

### CONSUMPTION

Consumption depends on the width of the joints and the size of the slabs.

### PACKAGING

**Mapedrain 1K Grout** grout is supplied in vacuum-packed 25 kg drums.

### STORAGE

**Mapedrain 1K Grout** grout remains stable for at least 12 months if stored in its original, sealed packaging.

### SAFETY INSTRUCTIONS FOR PREPARATION AND INSTALLATION

**Mapedrain 1K Grout** contains cement that, when in contact with sweat or other bodily fluids, produces an irritant alkaline reaction. Wear protective clothing, gloves and eye/face protection.  
For further information refer to the Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

### WARNING

*While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.*

**All relevant references  
for the product are available  
upon request and from  
[www.mapei.com](http://www.mapei.com)**



**Mapedrain  
1K Grout**



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