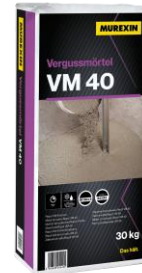




GROUTING MORTAR VM 40



- > can be used as a mortar for concrete repairs
- > expanding
- > loss-compensating
- > high freeze-thaw resistance
- > rapid compressive strength development



Product description

Grouting mortar VM 40 is a weatherproof, frost- and de-icing agent-resistant, shrinkage-compensating, expanding, flowable, polymer-modified grouting mortar with a high final strength. Grouting mortar VM 40 is used for load-bearing grouting work indoors and outdoors, e.g. machine foundations, bridge structures and supports, rails and crane runways, as well as for statically relevant concrete repairs (R4, XF4) in layer thicknesses of 8 to 150 mm (backfilled up to 300 mm). The product meets the requirements of ÖNORM EN 1504-3 and ÖNORM EN 1504-6.

- Repair of concrete structures (methods 3.1 and 3.2)
- Increasing or restoring the load-bearing capacity of concrete structures (methods 4.2 and 4.4)
- Maintaining and restoring passivity (methods 7.1 and 7.2)

Delivery format

Container	Outer packaging	Pallet
25 KG / PS	-	42 PS

Storage

Can be stored frost-free, cool, and dry on wooden shelves in the unopened original container for 730 days

Processing

Recommended tools

Slow-rotating electric agitator, mixer, suitable mixing vessel, brick trowel, smoothing trowel, grout ladle, spatula.

Mixing

Place the recommended amount of water in a clean mixing vessel, add the VM 40 grouting mortar and mix using a slow-rotating mixer until a homogeneous and lump-free blend is obtained (mixing time approx. 3-4 minutes).

Never use more water than specified for mixing!

Before pouring, allow the mortar to aerate for around 5 minutes.

Processing

Process the mixed mortar quickly. Mortar that has already stiffened may not be reprocessed by adding water.

When grouting/pouring, ensure that there is an appropriate pressure gradient and pour in the mortar continuously. Machine processing is recommended for larger grout volumes. When machine processing with a mixing pump, the required amount of water must be determined in advance.

Surface finishing, such as felting, should take place without adding water, if possible, so as not to alter the properties of the mortar.

Do not use the mortar for flat levelling.

Post-treatment:

Keep the fresh mortar from drying out too quickly by taking appropriate measures (e.g. covering).

Tool cleaning:

Clean tools and appliances with water immediately after use. Hardened material can only be removed mechanically.

Technical data

Chemical base	Cements, aggregates and admixtures
Bulk density	approx. 1.7 kg/litre
Fresh mortar thickness	approx. 2.2 kg/litre
Grain size	4 mm
Consumption	approx. 2.0 kg/m ² /mm layer thickness
Layer thickness	8 to 150 mm (300 mm for backfilling with gravel 4-8 mm)
Processing time	approx. 25 minutes
Certificates/test reports/class achieved	EN 1504-3 R4, ÖBV guideline R4, XF4
Bending tensile strength	1 day: ~ 5 MPa, 7 days: ~ 6 MPa, 28 days: ~ 8 MPa
Compressive strength	1 day ~ 25 MPa, 3 days ~ 35 MPa; 7 days: ~ 40 MPa, 28 days: ~ 55 MPa
Fire class	Euroclass A1
Thermal shock resistance	> 2.0 MPa (freeze-thaw stress with additional stress of application of de-icing agent)
Object and material processing temperature	min. +5 °C / max. +30 °C
Modulus of elasticity	approx. 27 GPa
Water consumption	approx. 3.5 litres of water per 25 kg of VM 40 grouting mortar

Test certificates

Tested in accordance with (standard, classification ...)

EN 1504-3 or EN 1504-6

Substrate

Suitable substrates

The substrate must be clean, solid, stable and free from separating and adhesion-reducing components. Old coatings are to be removed. The concrete substrate must have a compressive strength of > 25 MPa and a surface tear strength of at least 1.5 MPa as well as sufficient surface roughness. Before applying the mortar, the concrete must be wetted to capillary saturation and then left to dry until slightly moist.

All rust must be removed from steel parts.

Product and processing instructions

Material information:

- If processing outside the ideal temperature and/or humidity range the material properties could change markedly.
- Bring the materials to the proper temperature before processing!
- In order to maintain the product properties, do not add any foreign materials!
- Water dosing quantities or dilution information must be strictly adhered to!
- Check tinted products for colour accuracy before application!
- Colour consistency can only be guaranteed within the same batch.
- The colour formation is significantly impacted by the environmental conditions.
- Already mixed material that is beginning to harden may not be diluted further or mixed with fresh material!

Environmental information:

- Do not process at temperatures below +5 °C!
- The ideal temperature range for the material, substrate and air is + 15 °C to + 25 °C.
- The ideal relative humidity range is 40% to 60%.
- Increased air humidity and/or lower temperatures may prolong the drying, setting and hardening time, while lower air humidity and/or higher temperatures will speed it up.
- Ensure adequate ventilation during the drying, reaction and hardening phase; avoid draughts!
- Protect against direct sunlight, wind and weather!
- Protect adjacent components!

Tips:

- We recommend using a test surface first or a small area for initial, small-scale testing.
- Please heed the product data sheets of all MUREXIN products used in the process.
- Keep a genuine original container of the respective batch for later repair work.
- For heated screeds, a standard heating procedure is required before laying,
- Do not turn on the underfloor heating system during processing and hardening.

The information provided reflects average values that were obtained under laboratory conditions. Due to the use of natural raw materials, the indicated values of individual deliveries may vary slightly without impacting the product suitability.

Safety instructions

Please refer to safety data sheet for product-specific information with regard to composition, handling, cleaning, corresponding actions and disposal.

Limiting and monitoring exposure

Personal protective equipment:

General protection and hygiene measures:

- Common safety measures for handling chemicals are to be observed.
- Keep away from foodstuffs, beverages and feedstuffs.
- Take off contaminated, impregnated clothing immediately.
- Wash your hands before taking breaks and when finishing work.
- Avoid contact with the skin.
- Avoid contact with the eyes and skin.

Breathing protection:

- Wear breathing protection in case of inadequate ventilation.
- Filter P2.

Screed and Mortar technology

Hand protection:

- Protective gloves.
- The glove material must be impermeable and resistant to the product/substance/preparation.

Glove material

- Use gloves made from stable materials (e.g. nitrile).
- The selection of a suitable glove depends not only on the material, but also on other quality properties, which may vary from manufacturer to manufacturer.

Penetration time of the glove material

- The precise penetration time is to be found out from the protective glove manufacturer and complied with.

Eye protection: tightly sealed protective goggles.

Body protection: protective clothing.

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Please observe the current, technical, national and European standards, guidelines and data sheets regarding materials, substrates and the subsequent construction. Please contact us if you have any reservations or doubt.

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