



TECHNICAL DATA SHEET

OLY GROUT R4 MX

*Rapid-setting special mortar for repairs and
skimming in a single product in class R4*

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OLY GROUT R4 MX is a thixotropic, fibre-reinforced, single-component mortar with controlled shrinkage, specifically designed for repairs and surface skimming of concrete structures using a single product. Product of easy preparation and excellent workability, high adhesion to substrates, high mechanical and weathering resistance. It is also paintable.

As fields of application, it can be used for structural repairs and levelling of unevenness on non-planar substrates, indoors and outdoors, up to 30 mm.



Characteristics

Technical data	Typical value	Technical standard
Appearance	Grey powder	
Composition	Special cements, quartziferous aggregates, resins, additives	
Grain size	≤ 0,6 mm	
Application temperature	+ 5°C / +35°C	
Mixing water	≈ 20 %	
Apparent density of fresh mortar	≈ 1800 Kg/m ³	EN 1015-6
Apparent density of dried mortar	≈ 1600 Kg/m ³	EN 1015-10
Pot life	≈ 1h	
Minimum realisable thickness	≥ 3,0 mm	
Max. achievable thickness	30 mm	
Surface drying time	< 1h (+23°C e 50% U.R.)	
Waiting time for painting	≈ 3 days	
Chloride ion content	≤ 0,05%	EN 1015-17

Technical data	Typical value	Technical standard
Compressive strength (1 day / 7 days / 28 days)	>10,0 / >30,0 / >45,0 N/mm ² Class R4	EN 12190
Flexural strength (1 day / 7 days / 28 days)	>3,0 / >6,0 / >7,0 N/mm ²	EN 12190
Elastic modulus (28 days)	>20GPa	EN 13412
Adhesion to substrate (28 days)	≥ 2,0 N/mm ²	EN 1542
Thermal compatibility to freeze-thaw cycles	≥ 2,0 N/mm ²	EN 13687-1
Reaction to carbonation	Depth of carbonation (dk) ≤ of reference concrete	EN 13295
Capillary absorption	≤ 0,5 kg m ⁻² h ^{-0,5}	EN 13057
Reaction to fire	Class A1	
Contribution to smoke	None	
Hazard classification	None	CE 99/45

Consumption

As a mortar: 1,8 – 1,9 kg/m² per mm of thickness.

As a skim coat: 1,4 – 1,5 kg/m² per mm of thickness.

Packaging

25 kg carton sacks on 1500 kg pallets.

Preparation of substrate and mortar

- Prepare the substrate by thoroughly removing dust, efflorescence, oils, grease, and any loose or deteriorated parts via sandblasting, hydro-sandblasting, or vigorous washing with pressurised water.
- Saturate the surface with clean water until refusal, then remove any excess or wait for it to evaporate.
- Mix one bag of OLY GROUT R4 MX with approx. 4.5–5.0 litres of water, either manually or using a low-speed mechanical mixer, until a homogeneous and plastic mortar is obtained.
- Allow to stand for a few minutes, then stir briefly before applying the product in one or more coats, with a metal trowel, to a maximum thickness of 30 mm.

Warnings

Do not add cement, aggregates or other products to the mix. Do not use on substrates with a film of water on the surface. Avoid outdoor application on very hot or windy days, on frozen substrates, during thawing or with risk of frost in the following 24 h and in any case with temperatures below +5 °C or above 35 °C. In hot weather protect the product from too rapid initial evaporation, which can cause cracking, by moistening the treated surfaces during the first few hours of curing. Wash working tools well after use and wait until completely cured for painting.

Storage

Store in a cool, dry place, possibly on wooden pallets.

Storage period: 12 months

Packaging date: see bag stamp.

Safety information

The product is an article as defined in Regulation (CE) n. 1907/2006 and therefore no Safety Data Sheet is required. When using, it is recommended to wear protective gloves and goggles and to comply with the safety instructions in the workplace.

General warnings

This data sheet replaces and cancels previous versions.

The information in this data sheet corresponds to our current knowledge and experience. The data have been compiled with the utmost care and conscientiousness, without, however, any guarantee of accuracy or completeness and without any liability for the user's further decisions. The data in themselves do not entail any legal commitments or other secondary obligations. The data do not in principle exempt the customer from independently checking the product with regard to its suitability for the intended use. Our products are subject to continuous quality controls on both the raw materials and the finished product to ensure consistent quality. Our technicians and consultants are at your disposal for information, clarification and questions regarding the use and processing of our products, as well as for on-site inspections. The latest technical data sheets can be found on the internet at www.olympus-italia.com or can be requested from our offices.

Marking obligations are not related to the intrinsic nature of a given product, but to the purpose for which a specific material is used: before placing the order, it will be the customer's responsibility to submit all available documentation to the Works Department so that it can establish the suitability of the materials (in terms of certification and performance) in relation to the intended use.

To check the latest version of this technical data sheet, for information, technical assistance, and other structural reinforcement systems, contact the Olympus Technical Office:

email: ufficiotecnico@olympus-italia.com – tel: 800.910272 – web: www.olympus-italia.com

Product for professional use