

Ultramastic III



High performance, ready-to-use paste adhesive with no vertical slip and extended open time for the installation of ceramic tiles on walls and floors



CLASSIFICATION IN COMPLIANCE WITH EN 12004

Ultramastic III is a slip resistant (T) improved (2) dispersion (D) adhesive and with extended open time (E) as classified D2TE.

Ultramastic III is CE marked, as declared in ITT certificate N° 25040266/Gi (TUM) issued by the Technische Universität München laboratory (Germany).

WHERE TO USE

- Bonding of all types of ceramic tiles and mosaic on walls, floors and ceilings in interiors.
- Bonding of all types of ceramic tiles and mosaic on exterior walls.
- Bonding of thermal and acoustic insulating materials, decorative ceiling panels, foamed concrete blocks

onto

all substrates normally used in building.

Especially recommended for flexible and deformable non-metallic substrates.

Some application examples

Tiling over:

- Walls and floors of bathrooms and showers.
- Wood surfaces (provided they are moisture-stable, e.g. well bonded water-resistant plywood).
- Cement-based renders and substrates.

- Concrete walls, either precast or cast on site.
- Gypsum plaster or backerboard.
- Gypsum board.
- Painted wall surfaces (provided the paint is stable and the tiles absorbent).
- Existing ceramic tiles (provided one of the surfaces is absorbent).
- Large tiles on floors and walls.
- Insulating materials over renders.
- Ceramic tiles over underfloor heating systems.

TECHNICAL CHARACTERISTICS

Ultramastic III is a newly conceived adhesive in water dispersion based on special acrylic resins, selectively graded minerals and additives.

Ultramastic III is a ready-to-use easily trowellable white paste. Its 30-minute open time (at +23°C and 50% R.H.) allows tiles to be installed safely and reliably. Tiles adhere immediately without slippage because of Ultramastic III's excellent thixotropic properties.

Ultramastic III sets when its water dispersion evaporates. When hardened it has remarkable flexibility, excellent bonding strength and can withstand the vibrations and deformations of building materials.

Ultramastic III performs best when completely hardened. Floor and walls are ready for use when the

adhesive is completely dry, whether for installations in bathrooms and showers or for use in exteriors. For the latter the walls must be sufficiently protected from rain. Its resistance to temperature is excellent up to +90°C.

RECOMMENDATIONS

Ultramastic III is not recommended for installing tiles where water is constantly present (swimming pools, fountains) or over substrates subject to rising damp.

Do not use **Ultramastic III**:

- to install non-absorbent tiles on non-absorbent substrates;
- on metallic substrates or wooden substrates that are not moisture-stable;
- on substrates that are not thoroughly dry or those subject to constant rising damp;
- to install natural stone, especially light coloured calcareous stone (e.g. Carrara marble).

Avoid installing during very cold and very damp weather.

APPLICATION PROCEDURE

Preparing the substrate

Ultramastic III can be applied on all substrates which are sound and free of oil, grease, wax, and loose materials.

Cementitious substrates must be dry (as a rule, 1 week of curing for every cm of thickness) and not subject to rising damp.

Ultramastic III can be used on gypsum or similar surfaces without primer as long as the gypsum is solid and dry.

Ultramastic III can be used for installing absorbent ceramic tiles on walls painted with enamel, water-based paint or distemper, as long as the paint is well fastened, with a solid surface and thoroughly clean.

Spreading the adhesive

Ultramastic III should be applied to the substrate with a notched trowel.

The choice of trowel depends on the level of the substrate, the size of the tiles and the type of back. The adhesive must transfer to at least 60% of the tile in interior installations and 100% for external works.

- For mosaic tiles up to 5x5 cm, use MAPEI trowel N° 4 (consumption 1.5 kg/m²).
- For normal size ceramic tiles, use MAPEI trowel N° 5 (consumption 2.5 kg/m²).
- For uneven surfaces or tiles with highly profiled backs, use MAPEI trowel N° 6 (consumption approx. 4 kg/m²).

The open time for **Ultramastic III** is approximately 30 minutes at normal temperatures and humidity. The tiles must be set within that open time and the adhesive must be spread accordingly.

If a surface skin forms the adhesive must be removed and reapplied. Do not use at temperatures below +5°C.

Do not install outdoors in cold weather without being sure that the adhesive will dry within a few days, and never if frost threatens.

Installing the tiles

It is not necessary to wet the tiles before installing. However, when tiles are especially dusty they may be dipped in water.

The tiles should usually be installed by exerting a firm pressure to ensure transfer of the adhesive. Once in place they will not tend to slip.

Any adjustment of the tiles must be done within 40 to 45 minutes.

Tiles installed with **Ultramastic III** should not be washed down other than removing excess adhesive unless they are thoroughly dry (approx. 7 days after installation).

Bonding insulating materials

Apply **Ultramastic III** with a notched trowel or pointing trowel. The adhesive can be applied in various points or over the entire surface.

Press the materials firmly into place, staying within the open time of the adhesive.

GROUTING AND SEALING THE JOINTS

The joints should usually be grouted with **Keracolor FF** or **GG**, depending on the size, or with **Ultracolor Plus** (see "The Coloured Grouts" colour chart).

If good resistance to chemical agents is required, use **Kerapoxy**, a two-component anti-acid epoxy sealant.

For forming expansion and movement joints, use **Mapesil AC** or **Mapesil LM**, one-component silicone sealants, or **Mapectex AC4**, a one-component acrylic sealant.

In all of the above cases the size of the joints must be planned according to the type of grout and degree of flexibility required.

READY FOR USE

Surfaces and floors are ready for use after approximately 7 days, depending on the absorption of the substrate, the temperature and relative humidity on site.

Cleaning

Ultramastic III can be cleaned from surfaces with a wet sponge while the adhesive is still wet.

Tools and hands can be easily cleaned with water while the adhesive is still wet. When the adhesive has dried it may be removed with benzine, acetone, mineral spirits or **Pulicol**, or by mechanical means.

CONSUMPTION

Bonding of ceramic tiles:

Mosaic tiles	1.5 kg/m² (N° 4 trowel)
Tiles 15x15 cm over normal render	2.5 kg/m² (N° 5 trowel)
Tiles 15x15 cm over gypsum surfaces or very smooth surfaces	1.8 kg/m² (N° 4 trowel)
Floor tiles 15x15 cm to 20x20 cm	3.5 to 4 kg/m² (n. 5 or n. 6 trowel)

TECHNICAL DATA (typical values)

In compliance with:

- European EN 12004 such as D2TE
- American ANSI A 136.1 - 1999
- Canadian 71 GP 22 M type1

PRODUCT IDENTITY**Consistency:**

thick paste

Colour:

white

Density (g/cm³):

1.6

pH:

8.5

Dry solid content (%):

83

Hazard classification according to EC 99/45:

none.
Before using refer to the "Safety Instructions for preparation and application" paragraph and the information on the packing and Safety Data Sheet

Customs class:

3506 91 00

COMPOSITION AND PROPERTIES OF THE MIXTURE**Application temperature range:**

from +5°C to +35°C

Open time (EN 1346):

30 minutes

Adjustment time:

40-45 minutes

Waiting time before grouting:

12 to 24 hours

Ready for use:

approx. 7 days, depending on the absorbency of the substrate, ambient temperature and humidity

FINAL PERFORMANCES**a) Adhesion according to EN 1324 (N/mm²):**

- initial:

> 4

- after heat:

> 5

- after water immersion:

> 0.5

- at elevated temperature:

> 2

b) European UEAtc directive (N/mm²):

- 28 days at +23°C - 50% R.H.:

3.2

Resistance to moisture:

excellent

Resistance to ageing:

excellent

Resistance to solvents and oils:

fair

Resistance to acids and alkalis:

fair

Resistance to temperature:

from -20°C to +90°C

Deformability:

highly deformable

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Bonding of insulating materials:

Point bonding of foam 0.5 to 0.8 kg/m²

Bonding of foamed concrete, etc. 1.5 kg/m²

Total bonding on rough surfaces 2.5 kg/m²

PACKAGING

Ultramastic III is available in plastic buckets of 18, 12 and 5 kg and in 1 kg plastic containers in 12 piece packs.

STORAGE

24 months in original sealed packaging. Protect from frost.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Ultramastic III is not considered as dangerous according to the current norms on the classification of chemical products. It is recommended to take the usual precautions for handling chemical products.

The Safety Data Sheet is available on request for professional users.

FOR PROFESSIONALS.

WARNING

Although the technical details and recommendations contained in this report 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 applications; 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 products.

All relevant references of the product are available upon request



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