



Ultraplan Maxi



**Ultra-fast
drying self-levelling
compound for
thicknesses from
3 to 30 mm**

CLASSIFICATION ACCORDING TO EN 13813

Floors levelled with **Ultraplan Maxi** in accordance with the specifications described in this technical data sheet are classified as CT-C35-F7-A2_{fl} according to EN 13813.

WHERE TO USE

Ultraplan Maxi is used in interiors for levelling and smoothing differences in thicknesses from 3 to 30 mm on new or existing substrates, preparing them to receive all kinds of flooring where high resistance to loads and traffic is required. **Ultraplan Maxi** is especially suitable for areas subject to wheeled chairs and for use with underfloor heating systems.

Ultraplan Maxi is for interior use only.

Some application examples

- Levelling screeds incorporating electric heating cables prior to laying ceramic tiles or resilient floors.
- Levelling concrete slabs and cementitious screeds or **Mapecem**, **Mapecem Pronto**, **Topcem** or **Topcem Pronto** based screeds.
- Levelling anhydrite substrates.
- Levelling underfloor heating systems.

- Levelling existing concrete pavements, terrazzo, ceramic, natural stone and magnesite floors.

TECHNICAL CHARACTERISTICS

Ultraplan Maxi is a grey powder consisting of special cements with rapid setting and hydration together with selected graded silica sand, resins and special additives, prepared according to a formula developed in the MAPEI Research Laboratories.

Mixed with water **Ultraplan Maxi** becomes a highly fluid and easily workable mortar, with perfect self-levelling capacity, and high adhesion to the substrate and ultra-rapid drying.

Ultraplan Maxi can be applied with an automatic pressure pump at distances over 100 m.

Ultraplan Maxi can be spread in thicknesses up to 30 mm per coat without shrinkage, cracking or crazing, and develops very high compressive and flexural strength, as well as resistance to indentation and abrasion.

Ultraplan Maxi is ready to receive the flooring as soon as it has dried: the time required depends on the thickness of the levelling layer, the environmental temperature and relative humidity and on the absorption of the substrate.

RECOMMENDATIONS

- Do not add more water to a mix which has already begun to set.

- Do not add lime, cement or gypsum to the mix.
- Do not use **Ultraplan Maxi** for exterior levelling works.
- Do not use **Ultraplan Maxi** on substrates subject to continuous rising damp.
- Do not use as an unbonded screed. **Ultraplan Maxi** must always be anchored onto a solid substrate.
- Do not use **Ultraplan Maxi** on metal surfaces.
- Do not apply **Ultraplan Maxi** at temperatures below +5°C.

APPLICATION PROCEDURE

Preparing the substrate

Substrates must be dry, sound, free from laitance, dust, loose parts, paint, wax, oil, rust and traces of gypsum.

Cement-based surfaces not sufficiently solid must be removed or, where possible, consolidated with **Prosfas**, **Primer EP** or **Primer MF**.

Cracks must be repaired with **Eporip**.

Dusty or very porous concrete surfaces must be treated with a coat of **Primer G** (1 part **Primer G** with 3 parts of water) or with **Livigum** (1 part **Livigum** with 5 parts water), in order to fix the dust and to provide uniform absorption of the substrate.

Anhydrite screeds must be mechanically abraded and can only be levelled with **Ultraplan Maxi** after a coat of **Primer G**, **Mapeprim SP** or **Primer EP** has been applied.

On ceramic tiles or natural stone apply **Mapeprim SP** after the surfaces have been cleaned with detergents and mechanically abraded. Level with **Ultraplan Maxi** before **Mapeprim SP** has dried completely (indents must still be possible to make).

Preparing the mix

Pour a 25 kg bag of **Ultraplan Maxi** into a bucket containing 4.5-4.75 l of clean water and mix with a low speed electric mixer to obtain an homogeneous, self-levelling, lump free mix.

Larger quantities of **Ultraplan Maxi** can be prepared in suitable mixers.

After 2-3 minutes of **Ultraplan Maxi** slackening, the mix should be restirred and then it is ready for use.

The amount of **Ultraplan Maxi** mixed at any time must be used within 30-40 minutes (at a temperature of +23°C).

Applying the mix

Apply **Ultraplan Maxi** in a single coat from 3 to 30 mm with a large metal trowel or spiked roller.

Ultraplan Maxi can also be applied with an automatic pressure pump. Due to its remarkable self-levelling characteristics, **Ultraplan Maxi** immediately eliminates small imperfections (trowel marks, etc.).

When laying underfloor heating systems follow the regulations for the preparation of the substrate and the heating start-up procedure.

On large surfaces follow all the movement joints present in the substrate, and form control joints for every 50 m² approx.

Cleaning

When fresh, **Ultraplan Maxi** can be removed from tools and hands with water.

CONSUMPTION

1.7 kg/m² per mm of thickness.

PACKAGING

Ultraplan Maxi is available in 25 kg bags.

STORAGE

Ultraplan Maxi, stored in a dry place, is stable for at least 12 months. A longer storage (over 12 months) could determine a slower setting time of **Ultraplan Maxi**. However, the performances of the levelling layer at longer ages are not significantly modified.

Manufactured in compliance with the regulations of the 2003/53/EC Directive.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Ultraplan Maxi contains cement that in contact with sweat or other body fluids produces an irritant alkaline reaction. Use gloves and protective goggles. For further information refer to the 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 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 product.

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

TECHNICAL DATA (typical values)

Conformity with:

– European EN 13813 CT-C35-F7-A2^{II}**PRODUCT IDENTIFICATION**

Consistency:	fine powder
Colour:	grey
Bulk density (kg/m³):	1,300
Dry solid content (%):	100
Storage:	12 months in a dry place in original unopened packaging
Hazard classification according to EC 1999/45:	none. 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 +23°C - 50% R.H.)

Mixing ratio:	approx. 18-19 parts of water per 100 parts by weight of Ultraplan Maxi
Thickness per coat:	from 3 to 30 mm
Self-levelling:	yes
Density of mix (kg/m³):	2,050
pH of mix:	approx. 12
Application temperature range:	from +5°C to +30°C
Pot life:	30-40 minutes
Setting time:	50-70 minutes
Set to light foot traffic:	3 hours
Time before laying flooring:	1-3 days depending on thickness and temperature

FINAL PERFORMANCE

Compressive strength (N/mm²): – after 1 day: – after 3 days: – after 7 days: – after 28 days:	 20.0 25.0 27.0 35.0
Flexural strength (N/mm²): – after 1 day: – after 3 days: – after 7 days: – after 28 days:	 3.5 4.5 5.0 8.0
Resistance to abrasion: Taber Abrasimeter (Abrading wheel H22 disc - 550 g - 200 rpm) expressed in weight loss (g): – after 7 days: – after 28 days:	 1.5 1.2
Brinell hardness (N/mm²): – after 1 day: – after 3 days: – after 7 days: – after 28 days:	 70 80 90 100

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