

ULTRAPLAN MAXI

Ultra-fast drying self-levelling compound for
thicknesses from 3 to 40 mm



CLASSIFICATION ACCORDING TO EN 13813

Smoothing layers of **Ultraplan Maxi** applied according to the specifications in this Technical Data Sheet are classified as CTC35-F7-A2_{FL}-s1 in compliance with EN 13813 Standards.

WHERE TO USE

Ultraplan Maxi is used in interiors for levelling and smoothing differences in thicknesses from 3 to 40 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 admixtures, 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 40 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 for exterior levelling works.
- Do not use 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 on metal surfaces.
- Do not apply **Ultraplan Maxi** at temperatures below +5°C.

APPLICATION PROCEDURE

Preparation of the substrate

Substrates must comply with the specifications contained in the applicable standards for each country. Substrates must be dry, sound, free from laitance, dust, loose parts, paint, wax, oil, rust and traces of gypsum. Cementitious-based surfaces that are not sufficiently sound must be removed or, where possible, consolidated with a suitable MAPEI system (such as **Prosfas**, **Eco Prim PU 1K** or **Primer MF**).

Repair any cracks present in the substrate with **Eporip** or **Eporip SCR**.

Treat dusty or particularly porous concrete surfaces with a suitable primer such as **Primer G** diluted 1:1 with water or **Eco Prim T Plus** diluted with up to 1:4 with water, to hold the dust and even out the absorbency of the substrate.

Anhydrite screeds may only be levelled off with **Ultraplan Maxi** after sanding the surface and applying a suitable primer (such as **Primer G** or **Eco Prim T Plus** applied neat or diluted 1:1 with water).

Prime existing ceramic and natural stone surfaces with a coat of **Eco Prim T Plus** or **Eco Prim Grip Plus** after cleaning the surface with a suitable detergent and, if required, abrading the surface mechanically.

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 40 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.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

For further and complete information about the safe use of our product please refer to the latest version of our Safety Data Sheet, available from our website www.mapei.com.

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)

Conformity with:
– European EN 13813 CT-C35-F7-A2_{FL}-s1

PRODUCT IDENTITY

Consistency:	fine powder
Colour:	grey
Bulk density:	1,300 kg/m ³
Dry solids content:	100%
EMICODE:	EC1 Plus - very low emission

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

Mixing ratio:	18-19 parts of water per 100 parts by weight of Ultraplan Maxi
Thickness per coat:	from 3 to 40 mm
Self-levelling:	yes
Density of mix:	2,050 kg/m ³
pH of mix:	approx. 12
Application temperature range:	from +5°C to +30°C
Pot life:	30-40 minutes
Set to light foot traffic:	3-12 hours
Waiting time before application of the covering:	
– Ceramic tiles:	3-12 hours
– Resilient and wood flooring:	24-72 hours

FINAL PERFORMANCE

Compressive strength:

– after 1 day:	20.0 N/mm ²
– after 3 days:	25.0 N/mm ²
– after 7 days:	27.0 N/mm ²
– after 28 days:	35.0 N/mm ²

Flexural strength:

– after 1 day:	3.5 N/mm ²
– after 3 days:	4.5 N/mm ²
– after 7 days:	5.0 N/mm ²
– after 28 days:	8.0 N/mm ²

Resistance to Taber Abraser (Abrading wheel - 500 g - 200 rmp) expressed in weight loss:

– after 7 days:	1.5 g
– after 28 days:	1.2 g

Brinell hardness:

– after 1 day:	70 N/mm ²
– after 3 days:	80 N/mm ²
– after 7 days:	90 N/mm ²
– after 28 days:	100 N/mm ²

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 application; 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.

Please refer to the current version of the Technical Data Sheet, available from our website

www.mapei.com

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The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation. The most up-to-date TDS can be downloaded from our website www.mapei.com.

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