

ULTRAPLAN MAXI

Ultra-fast drying self-levelling compound for thicknesses from 3 to 40 mm with very low VOC's (volatile organic compounds)



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-A2fl according to EN 13813.

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 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**, **Topcem Pronto** based screeds.
- Levelling preparation under quality epoxy floor coatings (ie. **Mapefloor I300**).
- 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 rapid setting and hydrating cements, blended with graded silica sand, resins and special additives, according to a formula developed in the MAPEI research laboratory. When mixed with water, **Ultraplan Maxi** becomes a fluid, easy to work mix that has excellent self-levelling properties as well as excellent adhesion and rapid drying characteristics.

Ultraplan Maxi can be applied with a pressure pump.

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 absorption of the substrate, the ambient temperature and relative humidity.

Ultraplan Maxi has very low emissions of volatile organic compounds and will contribute valuable points towards Green Star™ credits.

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 a floating 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

Preparing the substrate

Substrates must be dry, solid and free of dirt, loose materials, paint, wax, oils, rust, traces of gypsum, curing and sealing compounds and all other materials which may interfere with bonding. All curing and sealing compounds, irrespective of the type (including dissipating curing compounds) must be completely mechanically removed. A minimum concrete surface profile (CSP) of CSP #3 is required.

If a moisture vapour barrier is required, please contact MAPEI Technical Assistance Department for further details.

Cement based substrates which are not sufficiently solid must be removed or wherever possible consolidated with **Prosfas**, **Primer EP** or **Primer MF**.

Cracks or crazing in cement substrates must be repaired with **Eporip**.

Porous substrates and anhydrite screeds must be treated with a primer such as **Eco Prim T Plus** (diluted 1 part primer mixed with 2 parts water) to prevent potential debonding and to make the substrate uniformly absorbent.

Non-porous substrates (such as ceramic tiles and natural stone) must be carefully cleaned to eliminate traces of wax and then treated with a primer such as **Eco Prim T Plus** (undiluted) or **Eco Prim Grip**.

Magnesite substrates must be primed with **Mapeprim SP**.

For all other forms of substrates and for further Surface Preparation information, please refer to **MAPEI's Surface Preparation Requirements brochure – Floor Covering Installation System** available on our website www.mapei.com.au or alternatively email technical-au@mapei.com.au and request a copy.

Preparing the mix

Pour a 20 kg bag of **Ultraplan Maxi** into a bucket containing 3.6-3.8 litres of clean water and mix with a low speed electric mixer to obtain a homogeneous lump free mix.

Mapei recommend the use of warm water (+18°C to +29°C) as opposed to cold water for mixing - particularly during the colder months. Successful installations often also require the levelling compound to be acclimatised to help offset the effects of a cooler substrate and jobsite ambient temperature conditions.

Larger quantities can be prepared in on-site cement mixers.

After 2-3 minutes of 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).

Spreading the mix

Apply **Ultraplan Maxi** in a single coat from 3 to 40 mm with a large metal trowel or rake.

Ultraplan Maxi can also be applied with an automatic pressure pump.

Due to its remarkable self-levelling characteristic **Ultraplan Maxi** immediately loses small imperfections (trowel marks, etc.).

When laying underfloor heating systems follow the local 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

While still wet, **Ultraplan Maxi** can be removed from tools and hands with water.

CONSUMPTION

1.7 kg/m² per mm of thickness.

PACKAGING

Ultraplan Maxi is supplied in 20 kg bags.

STORAGE

Ultraplan Maxi, stored in a dry, elevated area, is stable for at least 12 months. A longer storage (over 12 months) could determine a slower setting time of **Ultraplan Maxi**, however the final characteristics of the product do not alter.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Ultraplan Maxi contains cement that when in contact with sweat or other body fluids causes irritant alkaline reactions and allergic reactions to those predisposed. It can cause damage to eyes.

During use, wear protective gloves and goggles and take the usual precautions for handling chemicals. If the product comes in contact with the eyes or skin, wash immediately with plenty of water and seek medical attention.

For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)

In compliance with:

– EN 13813 - CT-C35-F7-A2fl

– GREEN STAR™ - Ultraplan Maxi can contribute valuable points towards Green Star™ projects due to the very low VOC content of this product. Refer SDS Section 9 for further details

PRODUCT IDENTITY

Consistency: fine powder

Colour: grey

Bulk density (kg/m³): 1,300

Dry solid content (%): 100

GREEN STARTM: meets and exceeds - very low VOC content g/l - contributes valuable points towards Green Star™ credits

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

Mixing ratio: 3.6-3.8 litres of clean water per 20kg bag of Ultraplan Maxi

Thickness per coat (mm): from 3 to 40

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 thickness ambient temperature

FINAL PERFORMANCE

Compressive strength (N/mm²):

– after 1 day: 20.0

– after 3 days: 25.0

– after 7 days: 27.0

– after 28 days: 35.0

Flexural strength (N/mm²):

– after 1 day: 3.5

– after 3 days: 4.5

– after 7 days: 5.0

– after 28 days: 8.0

Resistance to abrasion:

Taber Abrasimeter (Abrading wheel - 500 g - 200 rpm) expressed in weight loss (g):

– after 7 days: 1.5

– after 28 days: 1.2

Brinell hardness (N/mm²):

– after 1 day: 70

– after 3 days: 80

– after 7 days: 90

– after 28 days: 100

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.au

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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.au



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