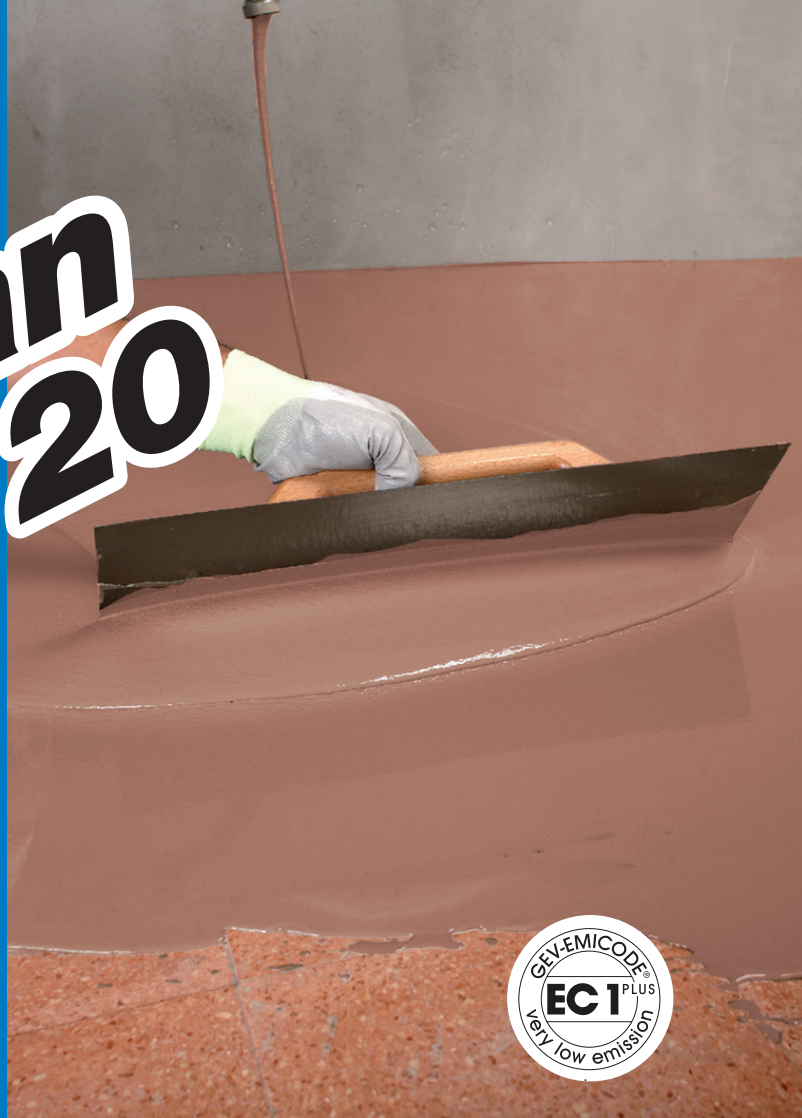




# Ultraplan Eco 20

**Rapid hydrating, fast-drying self-levelling compound**



## WHERE TO USE

**Ultraplan Eco 20** is used in interiors for levelling and smoothing differences in thicknesses from 1 to 10 mm on new or existing substrates, preparing them to receive flooring. **Ultraplan Eco 20** is especially suitable for areas subject to wheeled service loads such as chairs and trolleys.

Classified as CT-C20-F5-A1<sub>FL</sub> according to EN 13813.

**Ultraplan Eco 20** is for interior use only.

## Some application examples

- Levelling concrete slabs and cementitious screeds or **Mapecem**, **Topcem**, **Mapecem Pronto** or **Topcem Pronto** based screeds.
- Levelling anhydrite substrates (using a suitable primer such as **Primer G** or **Eco Prim T**).
- Levelling underfloor cooling/heating systems.
- Levelling existing concrete pavements, terrazzo, ceramic, natural stone and magnesite floors.

## TECHNICAL CHARACTERISTICS

**Ultraplan Eco 20** is a pale pink powder consisting of special cements with fast setting and hydrating properties, with selected graded silica sand, resins and special additives prepared according to a formula developed in the MAPEI Research Laboratories. Mixed with water, **Ultraplan Eco 20** becomes a fastdrying yet fluid and easily workable compound, perfectly self-levelling with a high bond strength to the substrate.

**Ultraplan Eco 20** can be applied with an automatic pressure pump for distances over 100 m.

**Ultraplan Eco 20** can be applied in thicknesses up to 10 mm per layer without shrinkage, cracking or crazing, and develops good compressive and flexural strength as well as resistance to indentation and abrasion.

Due to its rapid hydration formulation, subsequent installation of most types of flooring can begin approx. 12 hours after the application of **Ultraplan Eco 20**, regardless of thickness. For resilient allow a minimum 24 hours of prior to application.

## 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.
- Avoid using **Ultraplan Eco 20** for exterior levelling works, particularly where exposed to direct sunlight.
- Do not use **Ultraplan Eco 20** on substrates subject to continuous rising damp.
- An additional coat of **Ultraplan Eco 20** is not to be applied to the previous one if it is completely dry; in this case first prime with **Primer G** diluted with 1:3 of water by volume, after first lightly abrading the surface of the previous layer, or with **Eco Prim T** (diluted 1:1 water).
- Do not use **Ultraplan Eco 20** on metal surfaces.
- Do not use **Ultraplan Eco 20** when the temperature is below +5°C.

## APPLICATION PROCEDURE

### Preparation of the substrate

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

| TECHNICAL DATA (typical values)                                |   | EN 13813 CT-C25-F7-A2 <sub>II</sub> |
|--|---|-------------------------------------|
| <b>PRODUCT IDENTITY</b>  |   |                                     |
| Consistency:   | fine powder   |                                     |
| Colour:  | pale pink   |                                     |
| Bulk density (kg/m <sup>3</sup> ):                             | 1300  |                                     |
| Dry solids content (%):  | 100   |                                     |
| EMICODE:   | EC1 Plus - very low emission  |                                     |
| <b>APPLICATION DATA (at +23°C - 50% R.H.)</b>                  |   |                                     |
| Mixing ratio:  | 24-25 parts of water per 100 parts by weight of <b>Ultraplan Eco 20</b> |                                     |
| Thickness per coat:  | from 1 to 10 mm   |                                     |
| Self-levelling:  | yes   |                                     |
| Density of mix (kg/m <sup>3</sup> ):                           | 2000  |                                     |
| pH of mix:   | approx. 12  |                                     |
| Application temperature range:                                 | from +5°C to +35°C  |                                     |
| Pot Life:  | 20-30 minutes   |                                     |
| Setting time:  | 45-60 minutes   |                                     |
| Set to light foot traffic:                                     | 3-4 hours   |                                     |
| Time before subsequent bonding:                                | 24-48 hours   |                                     |
| <b>FINAL PERFORMANCE DATA</b>                                  |   |                                     |
| Compressive strength (N/mm <sup>2</sup> ):<br>– after 28 days: | < 20.0  |                                     |
| Flexural strength (N/mm <sup>2</sup> ):<br>– after 28 days:    | > 5.0   |                                     |

Cement based surfaces not sufficiently sound must be removed or, where possible, reinforced with **Eco Prim PU 1K**, **Prosfas** or **Primer 3296**.

Fissures in concrete substrates must be repaired with **Eporip** or **Eporip Turbo**.

Dusty or very porous concrete surfaces must be treated with a coat of **Eco Prim T**, diluted with water 1:1, or **Primer G**, diluted with water 1:3 (both primers have very low emission of volatile organic compounds - EMICODE EC1 R Plus) in order to even out the absorbency of the substrate.

Anhydrite screeds can be levelled with **Ultraplan Eco** only after the application of a coat of **Eco Prim T** or **Primer G** diluted with water 1:1. First apply a coat of undiluted **Eco Prim T** on ceramic or natural stone surfaces after the surface has been cleaned with detergents and mechanically abraded.

### Preparation of the mix

Slowly pour a 20 kg bag of **Ultraplan Eco 20** into a rust-free bucket containing 4.8-5 litres of clean potable grade water and mix with a low speed electric mixer fitted with a suitable mixing paddle to obtain an homogeneous, self-levelling lump free mix. Larger quantities of **Ultraplan Eco 20** can be prepared in mortar mixers. After allowing to settle for 2-3 minutes, the mix should be re-stirred and is then ready for use.

The quantity of **Ultraplan Eco 20** mixed must be used within 20-30 minutes (at a temperature of +23°C).

### Applying the mix

Apply **Ultraplan Eco 20** in a single layer of 1 to 10 mm thick with a large metal trowel or a squeegee, keeping the trowel slightly inclined to obtain the desired thickness. **Ultraplan Eco 20** can also be applied with an automatic pressure pump.

Due to its excellent self-levelling characteristic, **Ultraplan Eco 20** immediately eliminates small imperfections (trowel marks, etc.). If a second layer of **Ultraplan Eco 20** is required, it is recommended to apply it as soon as the first one is set to light foot traffic (approx. 3 hours at +23°C). Otherwise if the previous layer is completely dry, prime with **Primer G** diluted with 1:3 with water after first lightly abrading the surface of the previous layer or **Eco Prim T** (diluted 1:1 water).

The levelling layer of **Ultraplan Eco 20** will be ready to receive ceramic, natural stone (non-sensitive) fixed with adhesives after 12 hours at +23°C and resilient flooring, carpet, after 24 hours at +23°C (time can vary depending on the thickness of the levelling, the room temperature and humidity).

### Cleaning

Prior to setting, **Ultraplan Eco 20** can be cleaned and removed from tools and hands with water.

### CONSUMPTION

1.6 kg/m<sup>2</sup> per mm of thickness.

### PACKAGING

**Ultraplan Eco 20** is available in 20 kg bags.

### STORAGE

When stored in dry conditions in the original, unopened bags, **Ultraplan Eco 20** has a shelf life of 12 months. If stored at high temperature and or high humidity conditions the shelf life may be reduced.

A longer storage period could, determine a slower setting time of **Ultraplan Eco 20**. However, the performance of the levelling layer in the long term is not significantly affected.

### SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instructions for the safe use of our products can be found on the latest version of the Safety Data Sheet, available from our website [www.mapei.co.za](http://www.mapei.co.za).

PRODUCT FOR PROFESSIONAL USE.

### 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.co.za](http://www.mapei.co.za)

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This symbol is used to identify Mapei products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.



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