

ULTRAPLAN MARINE 900

Self-levelling, low-density, one-component, fibre-reinforced, quick hardening cementitious mortar for ship interior decks



WHERE TO USE

Ultraplan Marine 900 is used for levelling off internal decks on ships before installing floor coverings (tiles, resilients, resin, etc.).

Ultraplan Marine 900 can be applied in all areas not exposed to water. The applicable thickness, in a single layer, ranges from 3 mm to 20 mm.

TECHNICAL CHARACTERISTICS

Ultraplan Marine 900 is a powder composed of fast-setting and fast hydrating special cements, selected lightweight aggregates, resins, fibres and special additives mixed according to a formulation developed at MAPEI laboratories.

Ultraplan Marine 900 should be mixed with water before application. The mixed mortar is free-flowing, self-levelling, fast hardening and fast drying, and easily applied either manually or with pumps.

In order to achieve proper adhesion to the deck sheets, the preliminary application of **Eco Prim Marine** is always necessary.

RECOMMENDATIONS

- Do not add more water to the mix once it has started to set.
- Do not add lime, cement, gypsum or any other type of substance or compound.
- Do not use on exterior surfaces.
- Only apply the product on surfaces treated with **Eco Prim Marine**, which must be dry when the product is applied.
- Do not apply if the temperature is lower than +5°C.

APPLICATION PROCEDURE

Preparation of the substrate

Remove all traces of oil, grease, rust, paint, powder, crumbling material and any other compounds or substances from the application surface that could affect adhesion.

Prepare the surface with power tools, remove all dust and make sure it is clean and dry, then apply **Eco Prim Marine** by roller and/or brush. Make sure the product is applied in an even coat: the primer is black to make it

easier to apply and to avoid leaving areas without enough product. It is just as important to avoid applying too much primer: both conditions (layers too thin or too thick) could lead to detachment of the layer of **Ultraplan Marine 900**.

When **Eco Prim Marine** is dry (approximately 35–40 minutes) apply **Ultraplan Marine 900**.

Application

Pour about 5.7 to 6 litres of clean water into a clean container, having a suitable volume to hold the entire mixture, and then pour a 15-kg bag of **Ultraplan Marine 900** while mixing. Use an electric mixer at low speed until a homogeneous, lump-free, self-levelling mix is obtained. Larger quantities of **Ultraplan Marine 900** can be prepared in mixers for mortar. After 2–3 minutes of resting, stir the mixture for a few seconds and spread the product, which should be applied within its pot life. Temperatures above +23°C extend the product's pot life; it is good practice to only mix quantities of **Ultraplan Marine 900** that will be applied within 30–40 minutes. Spread a layer of **Ultraplan Marine 900** between 3 and 20 mm thick over the dry **Eco Prim Marine** with a metal spreader or rake. Check the consumption rate of the product while spreading to make sure only the thickness required is applied.

Ultraplan Marine 900 can also be applied with a rendering machine.

When a second coat is required, it is recommended to apply it as soon as the first one is set to foot traffic (approximately 3 hours at +23°C and 50% R.H.). Before applying the second coat, it is necessary to reapply **Eco Prim Marine** as an adhesion promoter, proceeding with the second coat only after the primer has dried (make reference to the Technical Data Sheet of **Eco Prim Marine** for drying times).

Various floor coverings can be applied to the **Ultraplan Marine 900** surface. Different recoating times (referring to 23°C and 50% R.H. and maximum applicable thickness) must be observed:

- 3 days for resilient, textile, resin and wood coatings
- 1 day for ceramics.

These times vary according to the thickness of the layer of mortar applied and the surrounding temperature and level of humidity. Check the level of residual moisture in the hardened layer to ensure compatibility with the covering or coating to be applied.

In case of recoating with resin flooring, a layer of **Mapedeck Epofloor** mixed with 20-30% by weight of quartz (grain size to be selected depending on the thickness to be applied) must be applied in between. **Mapedeck Epofloor** must be applied with a smooth steel trowel on a properly prepared surface free from dust. Then broadcast in excess the surface with quartz with grain size max. 0-0.5 mm on the fresh product.

If the mortar needs to be applied over several days, it is necessary to create suitable joints with a two-component epoxy product (for example **Mapedeck Epofloor**).

CLEANING

When still fresh, **Ultraplan Marine 900** can be removed from tools with water.

CONSUMPTION

0.9 kg/m² per mm of thickness.

PACKAGING

Ultraplan Marine 900 is available in 15 kg bags.

STORAGE

Ultraplan Marine 900 remains stable for 12 months if stored in a dry place. A long storage period may extend setting time of **Ultraplan Marine 900**, but it does not affect its final performance.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instruction for the safe use of our products can be found on the latest version of the SDS available from our website www.mapei.com.

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

Consistency:	fine powder
Colour:	grey
Bulk density (g/cm ³):	0.8
Dry solids content (%):	100

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

Mixing ratio:	38–40 parts of water per 100 parts by weight of Ultraplan Marine 900
Thickness per coat:	from 3 to 20 mm
Density of mix (g/cm ³):	1.25
pH of mix:	approx. 11
Application temperature:	from +5°C to +35°C
Workability time:	20-30 minutes
Setting time:	45-60 minutes
Set to light foot traffic:	3 hours
Coating:	– 1 day for ceramic floors – 3 days for resilient, textile, resin and wood (times are based on a thickness of 20 mm)

FINAL PERFORMANCE

Compressive strength (N/mm ²):	
– after 1 day:	8
– after 7 days:	10
– after 28 days:	16
Flexural strength (N/mm ²):	
– after 1 day:	2.5
– after 7 days:	3
– after 28 days:	4
Taber Test (H 22 – 500 g - 200 rpm) (g):	2.5
Density after 28 days (g/cm ³):	0.85-0.95

CERTIFICATIONS AND CLASSIFICATIONS

IMO MED:	non-combustible material
----------	--------------------------

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.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

LEGAL NOTICE

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.

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.

Mapei S.p.A.

Via Cafiero, 22, 20158, Milano



+39-02-376731



www.mapei.com



mapei@mapei.it

Any reproduction of texts, photos and illustrations published here is prohibited and subject to prosecution

