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MAPEFLOOR BINDER 930

One-component aliphatic polyurethane binder for decorative flooring





WHERE TO USE

Mapefloor Binder 930 is a one-component, moisture-curing, non-yellowing, transparent aliphatic polyurethane binder.

When mixed with natural aggregates, such as marble, natural stone or quartz, it may be used to make pervious floorings for internal and external surroundings.

When **Mapefloor Binder 930** is mixed with monochrome or multi-coloured assorted aggregates, it may be used to create unique flooring with an unlimited variety of patterns and aesthetic effects.

Mapefloor Binder 930 may be used for the following:

- street furniture, creating decorartive surfacing for squares, avenues and sidewalks;
- decorative resin surfacing for external surroundings such as terraces, balconies, walkways and porticoes;
- decorative pervious resin systems around swimming pools;
- decorative flooring for internal surroundings such as showrooms, department stores and retail outlets.

TECHNICAL CHARACTERISTICS

Mapefloor Binder 930 is a one-component, moisture-curing, non-yellowing, transparent aliphatic polyurethane binder developed in MAPEI R&D laboratories.

When **Mapefloor Binder 930** is mixed with clean, dry natural aggregates at the correct aggregate/binder ratio, it may be used to create surfaces with very high resistance to wear and yellowing.

Preparation is very simple and consists of mixing assorted aggregates, such as marble, quartz or natural stone (particle size 2-4 mm or 4-8 mm) with **Mapefloor Binder 930** and then placing the mix to form a multitude of decorative effects.

What is more, its excellent resistance to atmospheric agents means it may also be used for external applications, particularly for pervious surfaces.

Mapefloor Binder 930 also resists the action of the most commonly used de-icing salts.

RECOMMENDATIONS

- Do not apply Mapefloor Binder 930 on dusty, crumbly or unsound substrates
- Do not apply Mapefloor Binder 930 on wet surfaces or on surfaces contaminated with oil or greasy substances.
- Do not apply **Mapefloor Binder 930** on damp and inadequately primed substrates. Make sure that the temperature of the substrate is at least 3°C higher than the dew-point temperature.



- Do not apply Mapefloor Binder 930 if the surrounding level of humidity is higher than 70%.
- Do not apply **Mapefloor Binder 930** if it is about to rain. Protect the coating from water for at least 24 hours after application.
- Make sure the tensile strength of the substrate on which the flooring made from **Mapefloor Binder 930** is to be applied is more than 1.5 N/mm² and its compressive strength is more than 25 N/mm².
- Do not exceed the recommended dosage rates for **Mapefloor Binder 930**. If too much binder is used, blisters or craters could form on the surface.
- When preparing the mix, always use the correct ratio by weight for the aggregates and binder.
- Make sure the aggregates are perfectly clean and dry. If they are even slightly damp, blisters and/or foam could form.

APPLICATION PROCEDURE

Preparation of the substrate

It is very important that the surface is mechanically and properly prepared to guarantee perfect application and the best product performance. The most suitable method for preparing surfaces is by shot-blasting or grinding with a diamond disk. All dust must then be removed with a vacuum cleaner.

Surfaces to be treated with this product must be sound, compact and dry with no rising damp and must be perfectly clean with no oil or grease stains, cement laitance or any other substance or material that could affect its adhesion. All dust must be removed from surface with a vacuum cleaner.

Any cracks, holes and uneven areas in the surface must be repaired and levelled off with **Primer SN** fillerized with quartz sand or made thixotropic with **Additix PE**, or **Mapefloor EP19** epoxy mortar or **Mapefloor JA** or **Mapefloor JA Fast** thixotropic epoxy resin.

Priming the substrate

Prime the surface of the substrate with Mapecoat I 600 W.

Pour component A into component B and mix with an electric mixer at low speed with a spiral mixing attachment to form a smooth, even paste. Dilute with water at a ratio of 1:0.5 by weight and mix until well blended. Apply the product onto the floor to be coated and spread it out evenly and uniformly with a medium-pile roller. While the product is still wet, slightly broadcast the surface with **Quartz 0.5**. Before spreading the **Mapefloor Binder 930** mix, make sure the temperature of the substrate is at least 3°C higher than dew point and that the surrounding relative humidity is a maximum of 70%.

If the surrounding temperature is less than +12°C, please contact our Technical Service.

Preparation of the product

Mix **Mapefloor Binder 930** one-component polyurethane binder with the aggregates selected for the mix (natural stone, crushed marble or quartz, particle size 2-4 mm or 4-8 mm) at a binder/aggregates ratio of 1:20 by weight. Aggregates must be perfectly clean and dry.

Mix with a drill at low-speed with a spiral mixing attachment or in a traditional cement mixer.

Note: the binder/aggregate ratio may vary slightly according to the absorbency of the aggregates.

Application of the mix

Apply and spread the **Mapefloor Binder 930** and aggregates mix over the substrate like normal mortar using rakes and straight-edges, then compact the mix and smooth the surface with a straight trowel and/or a vibrocompactor or power float (helicopter).

To make it easier to smooth over the surface, especially when finer agglomerates are used, it is recommended to clean the trowel quite often with all-purpose polyurethane solvent so that it glides more easily over the surface.

Apply the mix when the surrounding temperature is between +12°C and +30°C.

Cleaning

Clean tools used to prepare and apply **Mapefloor Binder 930** with thinners for polyurethane resins immediately after use. Once hardened, the product can only be removed mechanically.

CONSUMPTION

According to the particle size, type and absorbency of the aggregates used in the mix and the thickness of the layer applied. The consumption rate of **Mapefloor Binder 930** mix is approximately 0.8-1.0 kg/m² per cm of thickness.



PACKAGING

5 kg drums.

STORAGE

Mapefloor Binder 930 may be stored for up to 12 months in its original packaging in a dry place at a temperature of at least +5°C. Protect from frost.

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.com.

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Colour:	transparent, colourless
Consistency:	liquid
Density (g/cm³):	1.15
Brookfield viscosity (mPa·s):	350-550 (spindle 2 - 20 revs)
Dry solids content (%):	93
APPLICATION DATA (at +23°C - 50% R.H.)	
Workability time:	70 mins
Set to light foot traffic (with care):	8 hours
Completely set to light foot traffic:	48 hours
Complete hardening time:	7 days
Surrounding application temperature:	from +12°C to +30°C
Mixing ratio by weight binder/aggregates:	1:20
FINAL PERFORMANCE (mortar 1 : 20 with aggregates)	
Compressive strength at +23°C (EN 196-1) (N/mm²): – after 3 days: – after 7 days:	approx. 11 approx. 12



Flexural strength at +23°C (EN 196-1) (N/mm²): – after 3 days: – after 7 days:	approx. 4 approx. 5
Hydraulic conductivity (UNI EN 12697) (L sec/m²):	73
Reaction to fire class (EN 13501-1):	B _{FL} -s1

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

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

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