



Mapecfloor Binder 930

One-component aliphatic polyurethane binder for decorative flooring



WHERE TO USE

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

When mixed with natural aggregates, such as marble, stone or quartz, it is used to form self-draining flooring suitable for internal and external environments.

When **Mapecfloor Binder 930** is mixed with single-coloured or multi-coloured assorted aggregates, it is used to create unique flooring with multi-coloured effects in an unlimited variety of geometric patterns.

Some application examples

- Flooring for courtyards, driveways and pavements.
- Decorative coatings in external areas, such as terraces and balconies.
- Decorative flooring in arcades.
- Decorative self-draining surfaces around swimming pools.
- Decorative flooring for internal environments, such as exhibition halls, warehouses and showrooms.

TECHNICAL CHARACTERISTICS

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

When **Mapecfloor Binder 930** is mixed at the right inert/binder ratio with dry, natural aggregates, it is

used to create coatings with high resistance to wear and yellowing.

Also, thanks to its simple preparation by just mixing it with mixed aggregates, marble, quartz sand or natural stone (2-4 mm or 4-8 mm), **Mapecfloor Binder 930** is particularly suitable for creating decorative flooring.

What is more, its excellent resistance to atmospheric agents means it may also be used externally, particularly to create self-draining surfaces.

When dry, **Mapecfloor Binder 930** has very little effect on the colour of the aggregates used in the mix, particularly important when you wish to maintain the original colour of the aggregates.

RECOMMENDATIONS

- Do not apply **Mapecfloor Binder 930** on dusty, crumbly or unsound substrates.
- Do not apply **Mapecfloor Binder 930** on wet surfaces or on surfaces contaminated with oil or greasy substances.
- Do not apply **Mapecfloor Binder 930** on substrates with a level of residual humidity higher than 4% and ensure the temperature of the substrate is at least +12°C.
- Make sure the tear strength of the substrate on which the flooring made from **Mapecfloor 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 **Mapecfloor Binder 930**. If too much binder is used, blisters and craters could form on the surface.

- When preparing the mix, always use the correct ratio in weight for the aggregates and binder.
- Make sure the aggregates are dry. If they are even slightly damp, blisters and/or foam could form.

APPLICATION PROCEDURE

Substrate preparation

It is very important that the surface is prepared correctly to guarantee correct application and the best performance of the product. The most suitable method to prepare the surface is by shot-blasting or by grinding with a diamond disk. All dust must then be removed with a vacuum cleaner. Surfaces to be treated with this product must be solid, perfectly clean and dry and have no capillary rising damp (max humidity not higher than 4%).

Any cement laitance present on the surface to be treated must be removed mechanically. Remove all traces of dust, grease and form release agents before applying the aggregates-Mapefloor Binder 930 mix. Any cracks must be repaired by filling them with **Eporip**, while any deteriorated areas of the concrete must be repaired with **Mapefloor EP19**.

Priming the substrate

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

To prepare the primer, pour component A into component B and blend together with a drill at low speed fitted with a spiral mixing attachment to form a smooth, even mix. Dilute with water at a ratio of 1:0.5 and keep mixing to form an even mix. Pour the mix onto the floor to be coated and spread it out evenly and uniformly using a medium-haired roller. While the product is still fresh, carefully sprinkle on a thin layer of **Quartz 0.5**. Before spreading the **Mapefloor Binder 930** mix, make sure the temperature of the substrate is higher than +12°C.

Preparation of the product

Mix the **Mapefloor Binder 930** one-component polyurethane binder with the selected aggregates (natural stone, crushed marble or quartz) with a grain size of 2-4 mm or 4-8 mm at a ratio of 1:20 (binder : aggregates). Mix together with a drill at low speed fitted with a spiral mixing attachment or in a normal cement mixer. The aggregates used in the mix must be dry.

N.B.: the ratio between the binder and aggregates may vary slightly depending on the absorption of the substrate and the type of aggregate used.

Application of the mix

Apply the mixture of **Mapefloor Binder 930** and aggregates like normal mortar using rakes and straight-edges, then compact the mix with a smooth, flat trowel or a mechanical vibro-compactator (helicopter).

To make it easier to smooth the surface, especially when finer aggregates are used, we recommend cleaning the trowel often with multi-purpose solvent for polyurethane products so that it slides more easily over the surface.

Apply the mix at a temperature of between +8°C and +30°C.

Cleaning

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

CONSUMPTION

According to the grain size and absorption of the aggregates used and the thickness of the layer applied.

PACKAGING

5 kg cans.

STORAGE

Mapefloor Binder 930 may be stored for up to 6 months in its original packaging in a dry place at a temperature of at least +5°C.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Mapefloor Binder 930 may cause sensitization if it comes into contact with the skin in those subjects sensitives to isocyanates. It is harmful if inhaled and may irritate the respiratory track. During use, it is recommended to use protective gloves and goggles and to 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. Use a suitable device for protecting the respiratory track. **Mapefloor Binder 930** is also hazardous for aquatic life. Do not dispose of these products in the environment. 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.

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

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

Colour:	transparent, colourless
Appearance:	liquid
Density (g/cm³):	1.15
Brookfield viscosity (mPa·s):	540-640 (rotor 2 - 20 revs)
Dry solids content (%):	93

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

Workability time:	70 mins
Set to foot traffic (light steps):	8 hours
Complete set to foot traffic:	48 hours
Complete hardening time:	7 days
Surface temperature:	at least +10°C
Application temperature:	from +8°C to +30°C
Binder/inert consumption:	1:20

FINAL PERFORMANCE

Compressive strength at +23°C (EN 196-1) (N/mm²): – after 3 days: – after 7 days:	11,44 12,47
Flexural strength at +23°C (EN 196-1) (N/mm²): – after 3 days: – after 7 days:	4,58 5,19
Reaction to fire class (mortar 1:20 with aggregates) (EN 13501-1):	B _{fl} -s1

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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 effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at www.mapei.com.
ANY ALTERATIONS TO THE WORDING

OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.

All relevant references for the product are available upon request and from www.mapei.com

