



Mapeflex PB27

Two-component self-levelling flexible sealant based on polyurethane polymers modified with hydrocarbon resins



WHERE TO USE

- Sealant for floor joints resistant to hydrocarbons.

Some application examples

- Sealing joints of airport runways.
- Sealing contraction joints on concrete floors in car parks, service areas and industrial buildings subject to vehicle traffic.
- Flexible sealing around machine bases in heavy industry where a high resistance to hydrocarbons is required.

TECHNICAL CHARACTERISTICS

Mapeflex PB27 is a two-component self-levelling sealant made up of hydrocarbon and polyhydric alcohol resins (part A), and a special isocyanate - based hardener (part B).

The two-parts are carefully mixed together to obtain a flowable self-levelling black paste.

Mapeflex PB27 can only be used on horizontal surfaces. After curing, which takes about 24-36 hours by chemical reaction and without shrinkage, **Mapeflex PB27** may be subjected to considerable elongation, resistant to abrasion, with good adhesion to concrete.

Mapeflex PB27 is resistant to temperatures from -30°C to +70°C and for short periods up to +150°C.

RECOMMENDATIONS

- Do not use on wet surfaces.
- Do not use on bituminous surfaces where the migration of oils is possible.
- Do not apply **Mapeflex PB27** when the temperature is below +10°C because setting time would be delayed.

APPLICATION PROCEDURE

Mixing

The two parts of **Mapeflex PB27** are supplied in the correct proportions and mixing should be carried out preferably with a low speed mechanical stirrer, until a uniform paste is obtained.

The setting time and pot life depend on the ambient temperature. The working time of the mixed product, at a temperature of +23°C, is approx. 45 minutes.

Do not use partial quantities of the pack unless the proportions of the two parts (94 parts of part A and 6 parts of part B) are measured with a scale.

Application

- All surfaces to be sealed must be dry, sound, free from dust and loose particles, oil, grease, wax, old sealant residues, old paint and rust.

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- In order to ensure the correct function of the sealant, **Mapeflex PB27** must be able to stretch and contract freely. Therefore, **Mapeflex PB27** must adhere perfectly only to the sides of the joints and not to the bottom, and the depth of the joint must always be less than the width.
- The joint must be sized so that the maximum foreseen movement is less than 25% of the total width. In order to control the depth of the sealant avoiding its adhesion to the bottom of the joints, expanded polyethylene foam, for example **Mapefoam**, must be applied before the application of **Mapeflex PB27**.
- A coat of **Primer PU60** must be applied to the sides of the concrete joint and let dry for 30-60 minutes before applying **Mapeflex PB27**.
- The filling of the joint is carried out in the usual way, pouring the properly mixed two parts of **Mapeflex PB27** from a container with a spout. Masking tape may be needed on and around the joints in order to prevent overflow onto surface.

CONSUMPTION

Consumption depends on the dimensions of the joint. The density of **Mapeflex PB27** is 1.4 g/cm³. A 10x10 mm joint requires approx. 140 g/m.

Cleaning

Mapeflex PB27 can be removed from surfaces, tools, cloths etc. with adhesive thinners before it has hardened; after hardening it can be cleaned mechanically or with **Pulicol**.

PACKAGING

Mapeflex PB27 is available in 10 kg and 5 kg.

STORAGE

24 months in sealed original packaging.

SAFETY INSTRUCTIONS FOR THE PREPARATION AND APPLICATION

Mapeflex PB27 part B is harmful when inhaled and irritant to the eyes, respiratory tract and skin. It could provoke sensitivity to those predisposed.

Mapeflex PB27 part A is dangerous to aquatic organisms. Avoid release to the environment.

FOR PROFESSIONALS.

WARNING

Although the technical data and recommendations contained in this report 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 applications. 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 use of the product.

**All relevant references
of the product are available
upon request**

TECHNICAL DATA (typical values)**PRODUCT IDENTITY**

	Part A	Part B
Colour:	black	yellowish
Density (g/cm³):	1.4	1.2
Hazard classification according to EC 99/45:	none	harmful Before using refer to the "Safety instructions for the preparation and application" paragraph and the information on the packing and Safety Data Sheet
Brookfield Viscosity (mPa·s):	50,000 (# 7 - 20 revs)	150 (# 1 - 50 revs)
Dry solids content (%):	100	100
Storage:	Mapeflex PB27 has a stable storage life of at least 24 months in unopened original packing	

COMPOSITION AND PROPERTIES OF THE MIXTURE at +23°C and 50% R.H.

Mixing ratio:	part A : part B = 94 : 6
Consistency of mix:	flowing liquid
Colour of mix:	black
Density of mix (kg/m³):	1400
Brookfield viscosity (mPa·s):	30,000 (# 7 - 20 revs)
Pot life:	45 min.
Application temperature range interval:	from +5°C to +35°C
Setting time:	10 h
Set to light foot traffic:	after 24 h
Cure time:	7 days

FINAL PERFORMANCE DATA

Shore-A-hardness:	12
Tensile strength (acc. to DIN 53504-S3a) (N/mm²):	0.46
Elongation at breaking point (acc. to DIN 53504-S3a) (%):	450
Modulus at 100% (acc. to DIN 53504-S3a) (N/mm²):	0.35
Resistance to abrasion:	excellent
Resistance to humidity:	excellent
Resistance to ageing:	excellent
Resistance to solvents and oils:	excellent
Resistance to temperature:	from -30°C to +70°C
Flexibility:	yes
Elongation in operation (continuous duty) (%):	25

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