



Mapeflex PU S25

Low modulus elastic polyurethane sealant for joints

WHERE TO USE

Mapeflex PU S25 has been specially developed for sealing internal and external vertical expansion and construction joints.

Some application examples

- Sealing internal and external joints subject to movements of up to 25% in:
- façades on civil and industrial buildings;
- pre-cast concrete panels;
- brick and block façades;
- metal panels;
- general construction work where the use of a gun-grade product is required.

TECHNICAL CHARACTERISTICS

Mapeflex PU S25 is a one-component, gun grade polyurethane-based sealant with a low modulus of elasticity that is very easy to apply.

Mapeflex PU S25 hardens by reacting with the moisture in the surrounding air and, because of its special characteristics, guarantees a long service life. The product is supplied ready to use and is available in 600 ml sausage to be used with a manual or pneumatic 600 ml gun, which makes it particularly easy and fast to apply.

Thanks to its thixotropic consistency it is quick to apply and, once hardened, may be painted over (carry out preliminary tests beforehand).

Mapeflex PU S25 is classified F-25 LM according to ISO 11600 standards.

RECOMMENDATIONS

- Do not apply on dusty or flaky surfaces.
- Do not apply on damp or wet surfaces.
- Do not apply on surfaces with traces of oil, grease or form-release compounds.
- Do not apply on bituminous surfaces where there may be traces of bleeding.
- Do not apply **Mapeflex PU S25** if the temperature is lower than +5°C.

APPLICATION PROCEDURE

Preparation of the surface to be sealed

All the surfaces to be sealed must be dry, sound and free of dust, crumbly parts, oil, grease, wax and old paint. To guarantee the sealant works correctly the joint must be free to expand and contract. It is important, therefore, that **Mapeflex PU S25** only bonds to the sides of the joint without bonding the bottom.

The size of the joint must be calculated so that, when in service, it compensates $\pm 25\%$ of its initial size.

Mapeflex PU S25



TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Appearance:	thixotropic paste
Colour:	grey, beige and off-white
Density (g/cm ³):	1.25
Dry solids content (%):	99
VOC emission (SCAQMD method):	0 g/litre
APPLICATION DATA (at +23°C and 50% R.H.)	
Application temperature range:	from +5°C to +40°C
Dust dry:	after 1.5 hours
Final setting:	3 mm/24 hours
FINAL PERFORMANCE (after 7 days at +23°C)	
Shore A hardness (DIN 53505):	20
Tensile strength (DIN 53504S3a) (N/mm ²):	1.0
Elongation at failure (DIN 53504S3a) (%):	900
In service temperature range:	from -40°C to +80°C
Resistance to UV rays:	good
Elongation in service (continuous use) (%):	± 25
Classification according to ISO 11600:	class F-25 LM
Modulus of elasticity at +23°C (DIN 52455) (N/mm ²):	0.20

To regulate the depth of **Mapeflex PU S25** and prevent it sticking to the bottom of the joint, insert **Mapectoam** closed-cell, flexible foam polyurethane cord with a suitable diameter beforehand in the joint to regulate the depth of the sealant according to the table below.

WIDTH/DEPTH RATIO TABLE	
Width of joint	Depth of sealant
up to 10 mm	same as the width
from 10 to 20 mm	10 mm in all cases
from 21 to 40 mm	half the width

To prevent the sealant spreading out of the joint and to leave a neat edge, we recommend applying masking tape along the edges of the joint.

Mapeflex PU S25 adheres well on absorbent surfaces even if they haven't been primed beforehand, as long as they are solid, free of dust and perfectly clean and dry. We recommend applying **Primer M** on slightly powdery surfaces or if the joints are subjected to high mechanical stress or frequent, prolonged contact with liquids. We also recommend applying **Primer M** on cementitious surfaces which are still fresh or to improve its adhesion on non-absorbent surfaces, such as iron, steel, aluminium, copper, ceramic, glass or galvanized or painted sheet.

Application of Primer M

Brush-apply a thin, even coat of **Primer M** one-component, solvent-free polyurethane primer for non-absorbent surfaces around the edges of the joint. The sealant must only be applied when the primer is no longer

sticky (after approximately 40 minutes at +23°C and 50% R.H.).

Preparation and application of Mapeflex PU S25

Apply Mapeflex PU S25 with a manual or pneumatic 600 ml gun suitable for 600 ml cartridges.

CONSUMPTION

The consumption of Mapeflex PU S25 varies according to the size of the joint.

See the table below for consumption of the product:

CONSUMPTION FOR 600 ML CARTRIDGE	
Size of the joint in mm	Metres
5 x 5	24
10 x 10	6
15 x 7.5	5.3
20 x 10	3
25 x 12.5	1.9
30 x 15	1.3

Cleaning

Mapeflex PU S25 may be removed from surfaces, tools, clothing etc. with toluene or alcohol before it hardens. Once hardened it must be removed mechanically or with Pulicol 2000.

PACKAGING

Boxes of 24 600 ml sausage.

COLOURS AVAILABLE

Mapeflex PU S25 is available in off-white RAL 9003*, beige RAL 1015* and grey RAL 7040*.

* RAL reference is approximate.

STORAGE

Mapeflex PU S25 may be stored for up to 12 months in a cool, dry place (5°C to 25°C - 50% R.H.).

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Mapeflex PU S25 is harmful and may cause sensitisation if inhaled. While applying the product we recommend using protective goggles and gloves and to work in well ventilated areas. In case of accidents, drowsiness or giddiness, seek urgent medical attention.

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

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

**Mapeflex
PU S25**



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433-7-2013

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