CONSTRUCTION

Maris Polymers®
POLYURETHANE SYSTEMS

MARIFLEX® PU 40SL

TECHNICAL DATA SHEET

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High Modulus polyurethane Joint-Sealant Self-leveling Mastic

Product description

The MARIFLEX® PU 40SL is a self-leveling, solvent free, permanent elastic, cold applied and cold curing, two component, high modulus polyurethane elastomer (mastic) used for horizontal chalking and joint-sealing.

Cures by reaction of the two components.

Advantages

- Simple application.
- Self-leveling.
- Quick application for long horizontal joints.
- UV and weathering resistant.
- Resistant to constant movement.
- Resistant to water, heat and frost.
- Maintain its mechanical properties over a temperature span of -30°C to +90°C.
- Provides excellent adhesion to most construction materials.
- Resistant to detergents, oils, fuels and seawater.

Uses

The MARIFLEX® PU 40SL is used for :

- Joint sealing of interior horizontal control joints.
- Adhesive for elastic bonding.
- Horizontal crack filling mastic.

Consumption

Consumption depends on volume of the joint or crack to be sealed.

Colors

The MARIFLEX® PU 40SL is supplied in white and light grey.
Other RAL colors may be supplied on demand.
Due to the sensitivity of polyurethane to UV rays, light shades change color. This change in appearance does not modify their mechanical properties or leak tightness.

Technical Data *

PROPERTY	RESULTS	TEST METHOD
Composition	Polyurethane Resin + Hardener	
Mixing Ratio	5 : 1 by weight	
Elongation at Break	>200%	ISO 8339
Elastic recovery	>70%	ISO 7389
Hardness (Shore A Scale)	40	DIN 53505, ASTM D 2240
Application Temperature	5°C to 35°C	
Skin formation time	60 min (at 23oC, 50%RH)	
Polymerized thickness after 24 hours	Up to 50mm (at 23oC, 50%RH)	
Chemical Properties	Good resistance against water, cleaning agents, and accidental spray with oils, hydrocarbons, acidic and basic solutions (10%).	

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Application

Surface Preparation

The surface needs to be clean, dry and sound, free of oils or any contamination, which may harmfully affect the adhesion of the mastic. Remove all loose material. Concrete surfaces must be dry and stable (at least 28 days). Moisture content should not exceed 5%.
Users must check that the mastic is compatible with the surface in terms of adhesiveness, staining and chemical compatibility (test a section first).

Mixing

Stir Component A well before using. MARIFLEX® PU 40SL Component A and Component B should be mixed by low speed mechanical stirrer, according to the stipulated mixing ratio, for about 3-5 min.
ATTENTION: The mixing of the components has to be effected very thoroughly, especially on the walls and bottom of the pail until the mixture becomes fully homogeneous.

Making the joint

Correctly size the joint. We recommend a joint width between 10 and 30 mm. The width / depth ratio of the joint should be about 2:1.

Priming

Prime absorbent surfaces, like concrete, screed and wood with MARISEAL® 710 primer. Prime non-absorbent surfaces like metal and ceramic tiles with MARISEAL® AQUA PRIMER.

Sealing

Apply the MARIFLEX® PU 40SL mixture (A+B) mastic by pouring into prepared joint / crack. When applying avoid air entrapment. Smooth with joint nail or putty knife. For a better finish, use protection strips.

May be painted after polymerization is complete. Use acrylic or vinyl dispersion paints after testing a section.

Packaging

MARIFLEX® PU 40SL is supplied in 5+1kg pails. Pails should be stored in dry and cool rooms for up to 9 months. Protect the material against moisture and direct sunlight. Storage temperature: 5^0-30^0C. Products should remain in their original, unopened containers, bearing the manufacturers name, product designation, batch number and application precaution labels.

Safety measures

MARIFLEX® PU 40SL contains isocyanates. See information supplied by the manufacturer. Please study the Safety Data sheet. PROFESSIONAL USE ONLY.

* All values represent typical values and are not part of the product specification. Upon UV exposure the sealant might fade on the surface and yellow.