

FLEX PU

Single-component polyurethane liquid membrane for waterproofing and protection. Suitable for waterproofing and protection of roofs, lightweight sheet metal or fibre cement roofs, asphalt membranes, parking lots and stadium stands, bridge platforms and irrigation channels.

- Excellent adhesion to almost any surface, with or without special adhesion promoters.
- No dilution is necessary.
- Excellent weathering and UV resistance.
- Excellent thermal resistance.
- Resistance to low temperature: the membrane remains elastic even at -40°C .
- Excellent mechanical properties, high tensile strength and tear resistance, abrasion resistance.
- Good resistance to chemical agents.

CHARACTERISTICS

Flex PU is a single-component, low-viscosity liquid polyurethane that vulcanizes with atmospheric humidity. It produces a resistant and elastic membrane with excellent adhesion to different surfaces. It contains a small percentage of solvent (xylol) and does not require further dilution. Apply with roller, brush or airless in two layers with a minimum total consumption of $1.5 - 1.8 \text{ kg/m}^2$. The product is based on pure polyurethane, elastomeric and hydrophobic resins, with the addition of special inorganic fillers that provide the material with excellent resistance to weather, chemical agents, UV rays, mechanical and thermal stress. The product is recommended for use on visible areas; available in white, red and light grey. The product complies with the EU guidelines for these types of materials, EOTA (European Organization of Technical Approval).



FIELDS OF APPLICATION

Flex PU can be used as waterproofing and protection of

- Concrete substrates
- Roofs
- Lightweight roofs made of sheet metal or fibre cement
- Asphaltic membranes
- Parking lots and stadium stands
- Bridge platforms
- Irrigation channels
- Mosaics
- Cement tiles
- Old asphaltic and acrylic sheaths (provided they adhere well to the substrate)
- Timber, metal, galvanized steel

WARNINGS

Not recommended for:

- non-compact and non-solid substrates
- waterproofing of swimming pools in contact with chemically treated water.

Do not apply Flex PU in the presence of naked flames. In enclosed spaces use forced ventilation and activated carbon masks. Note that solvents are heavier than air and will therefore concentrate closer to the ground.

CONSUMPTION

First layer: 0.7-0.9 kg/m²

Second layer: 0.8-0.9 kg/m²

Minimum total consumption: 1.5-1.8 kg/m²

STORAGE

Store in a dry and sheltered place at a temperature of 5 °C to 25 °C. In the original closed buckets it lasts for at least 12 months. Once opened use immediately.

PACKAGING

25 kg bucket.

PREPARATION FOR USE

Clean the surface using a jet of water. Remove oil, grease and contaminating soaps. Remove the surface salts of the cement, unadhered parts, chemical agents released from the moulds, cement evaporation retardant membranes. Fill the irregularities of the substrate with Monorasante. Apply the most suitable primer depending on the substrate - either Flex PU Primer or Flex PU Primer 2K. Apply the product with a roller or brush in at least two layers. Do not let more than 48h pass between application of the two layers. Clean the tools and equipment first with sheets of paper then with solvent. The rollers will not be reusable.

TECHNICAL SPECIFICATIONS

CHARACTERISTICS	PARAMETER	STANDARD	VALUES
Colour	-	-	red, grey, white
Operating temperature	°C	-	-40 to 80
max. instantaneous temperature	°C	-	200
Hardness	Shore A	ASTM D2240 / DIN 53505 / ISO R868	70
Ultimate tensile strength at 23 °C	kg/cm ² - [N/mm ²]	ASTM D412 / DIN 52455	80 (8)
Elongation percentage at 23 °C	%	ASTM D412 / DIN 52455	>500
Elongation percentage at -25 °C	%	ASTM D412	450
Water vapour transmission	gr/m ² hr	ASTM E96 (Water Method)	≈0.8
Adhesion to cement	kg/cm ² - [N/mm ²]	ASTM D4541	>20 (>2)
Hysteresis (after 300% elongation)	%	ASTM D412	< 3 %
QUV accelerated ageing test (4hr UV, at 60 °C [UVB lamps] and 4hr COND at 50 °C)	-	ASTM G53	Passed (2000 hours)
Hydrolysis (8% KOH, 15 days at 50 °C)	-	-	No significant change in the elastomeric properties
Hydrolysis (8% H ₂ O, 30-day cycle 60-100 °C)	-	-	No significant change in the elastomeric properties
HCL (PH=2, 10 days at RT)	-	-	No significant change in the elastomeric properties
Thermal stability (100 days at 80 °C)	-	EOTA TR011	Passed

The information contained in this document is, to the best of our knowledge, exact and accurate, but every recommendation and suggestion given is without any guarantee, since the conditions of use are not under our direct control. In case of doubt, it is always advisable to make preliminary tests and/or ask for the intervention of our technicians. Torggler S.r.l. reserves the right to modify, replace and/or delete the items, as well as to change the product data in this document without prior notice; in this case the indications given here may no longer be valid. This printed document replaces the previous one. Version 02.2020