

### DESCRIPTION

PU 100 is a single component, fast curing polyurethane based liquid waterproofing membrane. It creates an elastic, thick and durable film layer by curing with the humidity in the air.

### TYPICAL APPLICATIONS

- Uncovered roofs,
- Irrigation channels,
- Terraces, verandas and balconies,
- Wet areas under the coating (bathroom, kitchen, etc.),
- Car parks,
- Gypsum and cement panels,
- Light roofs made of metal or fiber cement,
- Indoor and outdoor application areas,
- Bridge platforms,
- Stadium stands,
- EPDM membranes.

### FEATURES AND ADVANTAGES

- Fast curing (approx. 2 hours).
- It provides a thick and bubble-free layer.
- It is suitable for single layer application.
- Easy to apply (by brush, roller or airless spray).
- When applied, it forms a single piece membrane that does not cause joint formation or leakage.
- It is resistant continuous water contact.
- It preserves its mechanical properties between -40°C and + 90°C.
- It is permeable to water vapor. Having a breathable structure it does not cause accumulation in the substrate.
- When the material is damaged, it can be repaired quickly and easily with PU 100.
- It has excellent UV resistant.
- It has excellent chemical resistant.

### CONCRETE SUBSTRATE STANDARDS

- Hardness: R28 = 15 Mpa
  - Humidity: W <10%
  - Temperature: +5 °C and +35 °C
  - Relative Humidity: <85%
- For detailed information, please consult our technical department.

### APPLICATION PROCEDURE

#### • SURFACE PREPERATION

In order to ensure a good adhesion oil, grease, paraffin waste, cement grout, loose particles, mold release agents, cured old membranes should be removed from the surface before the application. The surface should be thoroughly dried after washing with high pressure water and should be free from damp. Surface defects and cracks should be repaired with suitable products.

#### • PRIMING

For absorbent surfaces such as concrete, cement or screed, PU PRIMER 200 or EPOXY PRIMER should be used. AQUA PU PRIMER 2K or EPOXY PRIMER WB should be preferred on damp surfaces. TILE PRIMER should also be used on non-absorbent surfaces such as metal, ceramic or old coatings. Please examine primer table for detailed information.

#### • APPLICATION

Before using, the package should be opened and mixed with a low speed mixer for 2-3 minutes. For spray application, add CLEVER 001 at a maximum rate of 5% - 7%. The previously primed surface should be applied with a roller or brush until the entire surface is covered, by pouring the product at single or two layers. After the first coat is applied, the second coat should be applied within minimum 6 and maximum 48 hours. If the application of the second layer has not been made within specified time, before application please consult to the technical office of CLEVER POLYMERS for information and solutions. Consult our technical department for thinning.

### APPLICATION REMARKS

- It should be covered with PU 650 TC-1K or PU 600 TC-1K Aliphatic flexible top coat material in order to extend the strength and shelf life of polyurethane based waterproofing products which are applied to areas exposed to open air conditions or pedestrian traffic.
- Not recommended for unstable surfaces.
- It is not used for waterproofing of swimming pools with chemically treated water.

### CONSUMPTION

Total Consumption: 1,80 - 2,60 kg/m<sup>2</sup>

### CLEANING

After the application, all tools should be cleaned with CLEVER 001. Rollers and brushes should be disposed of.

### PACKAGING AND COLOR

It is grey and in 5 kg and 25 kg metal buckets.

### STORAGE AND SHELF LIFE

The product can be stored for a maximum of 12 months in unopened original pail at temperatures between + 5°C and +25°C. Opened product should be used at the soonest.

### PRECAUTIONS

The product should be used in well ventilated environments. The product should not be in contact with open fires. Smoking should not be allowed during application. Protective gloves and masks should be used for hands and eyes during application. If the material comes into contact with eyes, it should be washed immediately with sufficient water. For more detailed information, ask for the Safety Data Sheet (MSDS) from CLEVER POLYMERS technical department.



TECHNICAL DATA		
QUALIFICATION	METHOD	FEATURE
Coating Type	Clever Lab.	Single Component Polyurethane
Density	ASTM D 1475 / EN ISO 2811-1 (+20°C)	1,40 ± 0,05 gr / cm <sup>3</sup>
Viscosity	ASTM D4287 (+25°C)	2000 - 5000 cp
Flash Point	ASTM D93	35 °C
Water Vapor Permeability	ASTM E96	0,8 gr/m <sup>2</sup> hours
Gloss	Clever Lab.	Semi-Gloss
Application Temperature	Clever Lab.	+5°C to +35°C
Heat Resistance	Clever Lab.	100 days at +80°C
Sudden Shock Heat	Clever Lab.	200°C - Passed
Solid Content	Clever Lab.	85% (±5)
Hardness	ASTM D2240, DIN 53505, EN ISO R868	70 (Shore A)
Elongation	ASTM D 412 (+23°C)	> 400%
Tensile Strength	ASTM D 412 (+23°C)	> 6,5 N/mm <sup>2</sup>
Adhesion to Concrete	TSE EN 1542 (+23°C)	> 2 N/mm <sup>2</sup>
Tensile State After 300% Elongation	ASTMA D412	< 3%
QUV	ASTM G53	2000 Hours - Passed
Service Temperature	Clever Lab.	-40°C to +90°C
Tack Free Time	25°C / 55% RH	2-3 Hours
Recoat Time	Clever Lab.	6 hours to 48 hours

\* Viscosity measured at + 25°C according to EN ISO 3219 standards. Viscosity increases inversely with temperature.

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