

byk®



BYK PU 9101-1K

Polyurethane Based UV Resistant Waterproofing Coating

BYK PU 9101 – 1K is a single-component, UV resistant, polyurethane based liquid material. It is easy to apply. It is an economical waterproofing system that offers simple solutions. It adheres strongly to any type of surface, forming a highly elastic film. It contains pure elastomeric hydrophobic polyurethane resin which gives the material excellent chemical, mechanical and thermal resistance.

PLACES OF USAGE

- Plaster and cement panels,
- It can be used on tile with suitable primer,
- Bathrooms,
- Roofs,
- Lightweight roofs made of metal or fibre cement,
- Asphalt membranes,
- As the main waterproofing membrane in the waterproofing systems of parking garages,
- On stadium stands.

ADVANTAGES

- It has UV resistance.
- It has excellent mechanical properties.
- It shows effective resistance to chemicals.
- Contains no toxic substances after curing.
- Effective in water vapor transmission: Since the film breathes, there is no moisture accumulation under the layer.
- Its thermal resistance is excellent, the product never softens. Its maximum service temperature is 90 °C and maximum shock temperature is 200 °C.
- It is resistant to cold: The film retains its elasticity up to -40°C.
- Even if **BYK PU 9101 – 1K** is damaged in any way, the damaged part can be easily repaired in a short time.
- **BYK PU TH 901** can be used according to the conditions, even if it doesn't require thinning.

TECHNICAL FEATURES

Specifications	Values	Standards
Color	White, Gray	-
Density	1,37-1,42 g/cm ³	ASTM D1475 / DIN 53217 / ISO 2811, @ 20°C
Hardness	65 Shore A	ASTM D2240 / DIN 53505 / ISO R868
Viscosity	2500-3500 cP	ASTM D 2196-86 / EN ISO 3219 (+25°C)
Water Vapor Permability	0,8 gr/m ² hours	ASTM E96 (Water Method)
Concrete Adherence	>2,5 (N/mm ²)	ASTM D4541
Tensile Strength	>5 (N/mm ²) (+23°C)	ASTM D412 / EN-ISO-527-3
Elongation Percentage	≥500%	ASTM D412 / EN-ISO-527-3
Drying Time	6-8 hours	-
Re-adding New Layer	8-24 hours	-
Chemical Curing	7 days	-
Ouv Accelerated Weathering Test	Passed	ASTM G53



APPLICATION PROCEDURE

Apply at least two coats with a roller or brush. Wait 8-24 hours between coats. If you have exceeded the deadline (e.g. more than 4 days have passed) or if you are not sure about the adhesion between coats.

NOTE: The technical specifications written above were written according to the test results performed under 23°C and 50% relative humidity conditions. The values may vary under different temperature and humidity conditions.



BYK PU 9101-1K

Polyurethane Based UV Resistant Waterproofing Coating

Surface Preparations

Surfaces on which application will be made should be solid. Surface compressive strength must be 25 N/mm² and at least 1.5 N/mm² for adhesion test. The surface should be cleaned of loose, dismantled or moving concrete particles, oil and paint residues, cement slurry residues and other factors that may affect adhesion performance. In addition, the application surfaces should be roughened and wiped with suitable tools and machines. Wiped surfaces should be completely cleaned from dust with industrial type machines. Dust remaining in the surface pores can affect product performance and cause holes in the coating.

Priming

For absorbing surfaces **BYK PU PRIMER 9001-1K**, **BYK EP WB PRIMER 9006 - 2K** and **BYK PU PRIMER 9002 - 2K**
For hard and normal surfaces **BYK EP TR PRIMER 9005 - 2K**.

Application

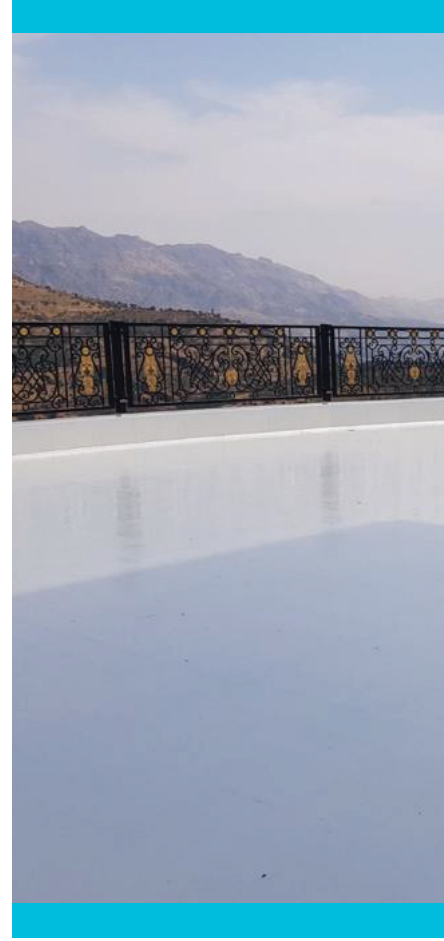
Apply at least two coats with a roller or brush. Wait 6-24 hours between coats.

Consumption

1st layer: 0.75-0,9 kg/m².
2nd layers: 0.75-0,9 kg/m².
Minimum total consumption: 1.5-1,8 kg/m².

Package

In 1 Kg, 5 Kg, 25 Kg special metal packages



Shelf Life

It can be stored in its original unopened buckets in dry conditions at temperatures between 5°C and 25°C for a minimum of 12 months. Containers of unmixed components must be kept hermetically sealed until the next use.

Storage

Store in unopened original packaging in a cool and dry place protected from frost. For short-term storage, a maximum of 2 pallets should be placed on top of each other and should be shipped with first in first out. For long-term storage, pallets should not be stacked on top of each other.

Safety Precautions

Flammable and combustible products should be kept away during application. No smoking. Take care to ensure continuous ventilation of the application area. Protective equipment such as goggles and gloves should be used during application. In case of eye contact, rinse thoroughly with plenty of water. Ask for Material Safety Data Sheet for detailed information. Keep out of the reach of children. The product must be used by professional users, taking into account the data in the technical information section.

Disclaimer

The data contained in this white paper is based on our scientific and practical knowledge. **DEMIRKOL TAAHHUT INSAAT SANAYI VE DIS TICARET LTD. STI.** is only responsible for the quality of the product. **DEMIRKOL TAAHHUT INSAAT SANAYI VE DIS TICARET LTD. STI.** cannot be held responsible for the consequences of using the product outside the written recommendations on how and where to use the product and/or misuse. The user is responsible for the correct application of our product. Our company is only responsible for the quality of the product. This catalog supersedes the information contained in the previous catalog. Our company reserves the right to make changes in all kinds of information and content details in this catalog. It is essential to check that the information in the catalog is up-to-date and valid. All rights reserved.



2404
Demirkol Taahhut Insaat Sanayi Ve Dis Ticaret
LTD. STI.
Ulus Mahallesi Gulistan 2 Sokak No:3
Buyukcekmece Istanbul - TURKIYE

2404-CPR-BK1047
DOP NO: BYK PU 9101 – 1K
EN 1504-2:2004
BYK PU 9101 – 1K

Surface protection products, Coating Application
(C)/2.2
Surface protection systems Principle 2(MC) 2.2
Coatings)

Water vapor permeability (Water-vapour transmission properties)	Class I
Capillary water absorption and Water permeability	0,0075 kg/m ² .h ^{0,5}
Bond strength by pull-off	2,20 MPa
Reaction to fire	E
Hazardous Substances (chemicals dangerous to the environment and health)	Complies with 5.4