



## Uniguard PU 1K

### Product Description

Uniguard PU is a one-component flexible polyurethane membrane used for long lasting waterproofing, cures by reaction with ground and air moisture which result a strong adhesion over different surfaces. It provides an excellent thermal resistance & mechanical property. it works as a hydrophobic barrier membrane from water attacks. It is not affected by the stretching of the surface underneath and allows the surface to breathe and protect it from harsh environmental conditions.

### Features and Benefits

- The white color reflects much of the solar energy and so reduces the internal temperature of buildings considerably.
- Excellent thermal resistance, the product never turns soft. Max service temperature 80 C, max shock temperature 150 C.
- 350% elongation.
- Excellent mechanical properties.
- Water vapor transmission: The film breathes, preventing moisture buildup beneath the coat.

### Typical use

Waterproofing and protection of, gypsum and cement boards, Roofs, Light roofing made of metal or fibrous cement, Asphalt membranes.

### Substrate

Concrete, fibrous cement, cement roof tiles, asphalt coats, wood, corroded metal, galvanized steel, basalt and glass.

### Product Data

<b>Packaging size</b>	16 L
<b>Form</b>	Liquid
<b>Colors</b>	White and Grey
<b>Solids by Weight</b>	71 - 73%
<b>Solids by Volume</b>	59%
<b>Density</b>	1.30 – 1.35 g/cm <sup>3</sup>
<b>Hardness ASTM D2240, 7 days</b>	80 Shore A
<b>Elongation: ISO 37, 7 days</b>	>300%
<b>Tensile Strength: ISO 37, 7 days</b>	5 MPa



<b>Tear Strength:</b> ASTM D624, 7 days	30 N/mm
<b>Crack Bridging</b>	4 mm
<b>Pull Off Adhesion</b> ASTM D4541, 7 days	> 2.5 MPa

## Application data

The product can be applied by

<b>Roller</b>	Recommended
<b>Brush</b>	Recommended
<b>Spray</b>	Recommended

## Cleaning of painting tools

Immediate cleaning with xylene is necessary.

## Film Thickness per coat

<b>Dry film thickness</b>	1 mm – 2 mm.
<b>Theoretical spreading rate</b>	4.5 - 9 m <sup>2</sup> /pack.

## Thinner (solvent to mix with)

Uniguard Thinner PU.

## Dilution (Mix Ratio)

For application by spray thin with 5-10% Uniguard Thinner PU.

## Conditions during application

- Do not apply if the temperature is below 10°C and not more than 40°C. Avoid working under direct sunlight.
- Substrate temperature should be at least 3°C above the dew point.
- The hardness of the surface = 15-25 MPa.
- Relative humidity: Less Than 80 %.
- Surface humidity: Less than 10%

<b>Drying and curing time</b>	25 °C
<b>Surface (touch) dry</b>	20 h
<b>Dry to over coat, @ RH%50</b>	24 h
<b>Full Cure</b>	7 days



## Directions for use

### Surface preparation

- Ensure that surface is thoroughly cleaned and free from grease, oil, dirt, salt and other containment.
- Fill surface irregularities with the necessary product.

## Recommended Paint System

### Number of coats:

2 coats of Uniguard PU to achieve 800 $\mu$  - 1mm thickness.

### Topcoat:

2 coats of Uniguard PU Topcoat to increase service life.

## Storage

- Store in cool, dry place in a well-sealed container away from moist air for 6 months.
- Keep away from heat, ignition sources and from children.

## Caution

- Clean mixing container before use. Do not use dirty tools.
- Ensure that containers and tools are free from moisture.
- Do not exceed dilution ratios.
- Keep out of the reach of children.

## Health and safety

Possible Hazards: It causes irritation in case of skin contact & eye contact, flush immediately with plenty of water for at least 10 minutes and seek medical advice in case it happened. Refer to Uniguard PU 1K MSDS for more information.