

# WHITECHEM PU MEMBRANE TR 250

*Polyurethane Based, One Component, Aliphatic, Transparent, Topcoat Waterproofing Membrane*

## 1 – PRODUCT DESCRIPTION

**WHITECHEM PU MEMBRANE TR 250**, one component, UV resistant, solvent, aliphatic, transparent polyurethane based topcoat waterproofing and coating material. Thanks to special curing system, a non-bubble, elastic and high strength membrane is formed. It maintains its flexibility and transparency for many years. It is used in waterproofing and protection of glossy surfaces such as decorative ceramic, marble, granite and glass.

## 2 – PRODUCT FEATURES

- UV resistant
- Aliphatic (color change under sunlight, no yellowing)
- Easy to apply (brush, roller, airless gun)
- Excellent adhesion
- Suitable for light foot traffic
- Resistant to weather conditions (temperature, water and freezing)

## 3 - APPLICATION AREAS

Waterproofing and protective purposes;

- Tiles, ceramics, mosaics, marble and granite surfaces
- Glass and glass brick surfaces
- GRP, PVC, polycarbonate based roof lighting surfaces
- Wood and bamboo surfaces

## 4 - APPLICATION CONDITIONS

- The surface must be strong and of sufficient strength.

- The concrete should be allowed to dry for at least 28 days before application on fresh concrete.
- The surface and ambient temperature should be at least 5 ° C and maximum 35 ° C.
- The maximum amount of moisture in the air should be 80%.
- Surface moisture content should not exceed 4%.
- Attention should be paid to condensation on the surface. Application should not be made early in the morning. The surface temperature should be at least 3 ° C higher than the dew point.
- It should not be applied on surfaces where rain is expected within 6-8 hours.

## 5 – SURFACE PREPARATION

- The application surface should be clean and dry.
- If necessary, the concrete surface must be roughened mechanically.
- Cracks and joints on the surface should be covered with appropriate repair materials.
- Elements and chemicals that prevent adhesion (oil, grease, silane, salt, silicone, siloxane) should be removed from the surface. Do not wash to clean the surface.

## 6 – PRIMER APPLICATION

- Silane based primer is applied to the surface with a clean cloth. The used cloth should be replaced frequently.
- It should be ensured that primer is applied on all.

- One coat primer is applied on surfaces such as tiles, ceramics, glass, marble and granite. Consumption is approximately 40-50 g / m<sup>2</sup>.
- Two coats are applied on more absorbent and porous surfaces. Total consumption is about 70-80 g / m<sup>2</sup>.
- Attempting to use as little primer as possible to prevent formation of a distinct primer film on the surface.
- Do not apply primer for surfaces such as GRP, PVC, polycarbonate.

### 7 – MEMBRANE APPLICATION

- After application of the primer on the surface (1-2 hours), start the application.
- Stir for 1-2 minutes before applying to get a transparent mixture of **WHITECHEM PU MEMBRANE TR 250**. Mix gently to avoid air bubbles.
- Apply with the solvent-resistant short-haired roller or brush.
- At least 2 coats should be applied. It can be applied in 3 layers depending on where to apply. It is recommended to apply the floors in such a way that the application directions are perpendicular to each other.
- Waiting time between coats varies between 12-16 hours depending on temperature and humidity.
- The dry film thickness for each coat should not be more than 0.60 mm.

### 8 – CONSUMPTION

- Consumption for each coat is 200-250 g / m<sup>2</sup> / fold. Consumption may vary according to surface permeability, weather conditions, and the technique of application.

### 9 – TECHNICAL SPECIFICATIONS

Test Name	Result	Test Method
<b>Chemical Structure</b>	Solvent Polyurethane	
<b>Density</b>	1,00 ± 0,03 gr/ml (23°C ve %50 R.H.)	(ASTM D1875)
<b>Appearance / Color</b>	Liquid, Transparent	
<b>Solid Content Ratio</b>	As a weight ~ %84	
<b>Viscosity</b>	500-1000 cps	
<b>Tack Free Time</b>	~ 1 hour	
<b>Rain Resistance</b>	5-7 hours (23 °C ve % 50 R.H.)	
<b>Time to walk on</b>	24-36 hours (23 °C ve % 50 R.H.)	
<b>Full Curing Time</b>	~ 7 gün (23 °C ve % 50 R.H.)	
<b>Hardness (Shore A)</b>	50 ± 5	(ASTM D 2240)
<b>Elongation</b>	≥ % 250	(DIN 53504)
<b>Tensile Strength</b>	~ 1,50 MPa	
<b>Service Temperature</b>	-20 °C ile +80 °C arası	(ISO 7390)
<b>Capillary water absorption and water permeability</b>	0,009 kg/m <sup>2</sup> .h <sup>0,5</sup>	(EN 1062-3)
<b>Adhesion strength through the pull-out test</b>	> 2,4 N/mm <sup>2</sup>	(EN 1542)
<b>Abrasion Resistance</b>	Ortalama 358 mg	TS 8103 EN ISO 5470-1
<b>Fire Resistance Class</b>	F	EN 13501-1

#### **10 - PACKAGING**

- 15 kg metal bucket

#### **11 - COLOR VARIETIES**

- No Color, Transparent

#### **12 - SHELF LIFE AND STORAGE CONDITIONS**

- It is suitable for 9 months from the date of production when stored correctly between +5 ° C and +30 ° C in original, unopened and undamaged packages.
- Products should be stored in dry and places where not having direct sunlight.

#### **13 - WARNING AND SUGGESTIONS**

- Personal protective equipment must be used during application. In case of contact with skin, wash with plenty of water. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Keep products away from sources of ignition. Do not heat the products by sun or other means. Do not smoke at the time of application.
- There must be sufficient air circulation in the application area.
- The opened buckets should be consumed in a short
- It is not recommended to be used in pools such as ornamental ponds, wastewater facility pools or pools permanently submerged.
- In order to minimize the bubble formation in the membrane, application should not be made thicker than the maximum application thickness in one coat.
- The finished product should be protected against rain and mechanical stress until it is dry.

- Clean all tools and application equipment with thinner immediately after use. Hardened / cured material can only be cleaned by mechanical methods.