



Sealants Adhesives & Chemicals to Filler Board

# /URETHANE EUATING



## **PRODUCT DESCRIPTION**

is a pigmented, color- and UV-stable, highly permanent elastic, cold applied and cold curing, one component aliphatic polyurethane coating, used as a top-coat for protection over exposed, polyurethane waterproofing coatings. Cures by reaction with ground and air moisture over a unique moisture triggered chemical reaction. Protects very efficiently, especially if a dark final color is desired.

### CONSUMPTION

120-250 gr/m<sup>2</sup> in one or two layers. This coverage is based on practical application by roller onto a smooth surface in optimum conditions. Factors like surface porosity, temperature, humidity, application method and finish required can alter consumption.

### COLORS

Is supplied in white, light grey and red. Other RAL colors may be supplied on demand.

## **ADVANTAGES**

- Simple application (roller or airless spray).
- One component.
- Increases the abrasion and wear resistance of the waterproofing membrane underneath.
- UV and Color stable.
- Gives a glossy and easy-to-clean surface.
- Does not show the chalking effect of aromatic polyurethane coatings.
- Resistant to water, heat and frost.
  Maintains its mechanical properties over a temperature span of -40°C to +90°C.
- The waterproofed surface can be walked on (domestic pedestrian traffic).

#### USES

- Waterproofing of Roofs
- Waterproofing of Balconies, Terraces and Verandas
- Waterproofing of Pedestrian Decks and Walkways
- Protection of Polyurethane Foam Insulation

# **TECHNICAL DATA \***

PROPERTY	RESULTS	TEST METHOD
Composition	Pigmented Aliphatic moisture triggered Polyurethane polymer. Solvent based	
Resistance to Water Pressure	No Leak	DIN EN 1928
Elongation at break	289%	DIN EN ISO 527
Tensile strength	3,72 N/mm <sup>2</sup>	DIN EN ISO 527
Elongation at break after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m2)	372 %	DIN EN ISO 527
Tensile strength after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m2)	2,68 N/mm <sup>2</sup>	DIN EN ISO 527
Gloss retention after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m2)	Good	DIN 67530
Surface chalking after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m2)	No chalking observed. Chalking grade 0	DIN EN ISO 4628-6
Adhesion to the MARISEAL® 250	>2 N/mm <sup>2</sup>	ASTM D 903
Hardness (Shore A Scale)	65	ASTM D 2240 (15")
Solar Reflectance (SR) (white color)	93.5%	ASTM E903-96
UV accelerated ageing, in the presence of moisture	Passed - No significant changes	EOTA TR-010
Hydrolysis (5% KOH, 7days cycle)	No significant elastomeric change	Inhouse Lab
Service Temperature	-40°C to +90°C	Inhouse Lab
Tack Free Time	1-3 hours	
Light Pedestrian Traffic Time	12 hours	Conditions: 20°C, 50% RH
Final Curing time	7 days	
Chemical Properties	Good resistance against acidic and alkali solutions (5%), detergents, seawater and oils.	





# LIQUID APPLIED POLYURETHANE WATERPROOFING MEMBRANE

# **ADVANTAGES**

- Simple application (roller or airless spray).
- When applied forms seamless membrane without joints.
- Resistant to water.
- Resistant to frost.
- Resistant to root penetration, so it can be used in green roofs.
- Crack-bridging up to 2mm, even at -10°C.
- Provides water vapor permeability, so the surface can breathe.
- Provides excellent thermal resistance, it never turns soft.
- Provides excellent weather and UV resistance.
- Waterproofs old bitumen-, asphalt felts by covering them, without the need to remove them prior to application.
- Provides high sun reflectivity, contributing to thermoinsulation.
- Maintains its mechanical properties over a temperature span of -40°C to +90°C.
- Provides excellent adhesion to almost any type of surface.
- The waterproofed surface can be used for domestic and public pedestrian and vehicular traffic.



- Resistant to detergents, oils, seawater and domestic chemicals.
- Even if the membrane gets mechanically damaged, it can be easily repaired locally within minutes.
- Does not need the use of open flames (torch) during application.
- Over 15 years of positive feedback worldwide.

# **TECHNICAL DATA**

PROPERTY	RESULTS	TEST METHOD
Elongation at Break	> 800 %	ASTM D 412 / DIN 52455
Tensile Strength	> 4 N/ mm <sup>2</sup>	ASTM D 412 / DIN 52455
Water Vapor Permeability	> 25 gr/m²/day	ISO 9932:91
Resistance to mechanical damage by static impression	High Resistance (class:P3)	EOTA TR-007
Resistance to mechanical damage by dynamic impression	High Resistance (class:P3)	EOTA TR-006
Resistance to Water Pressure	No Leak (1m water column, 24h)	DIN EN 1928
Adhesion to concrete	>2,0 N/mm <sup>2</sup> (concrete surface failure)	ASTM D 903
Crack Bridging Capability	up to 2 mm crack	EOTA TR-008
Hardness (Shore A Scale)	65	ASTM D 2240 (15")
Resistance to Root Penetration	Resistant	UNE 53420
Solar Reflectance (SR)	0.87	ASTM E903-96
Solar Emittance (ε)	0.89	ASTM E408-71
Thermal Resistance (80°C for 100 days)	Passed - No significant changes	EOTA TR-011
UV accelerated ageing, in the presence of moisture	Passed - No significant changes	EOTA TR-010
Resistance after water aging	Passed	EOTA TR-012
Hydrolysis (5% KOH, 7days cycle)	No significant elastomeric change	Inhouse Lab
Construction Material Fire class	B2	DIN 4102-1
Resistance to Flying Sparks and Radiating Heat	Passed	DIN 4102-7
Service Temperature	-30°C to +90°C	Inhouse Lab
Shock Temperature (20min)	200°C	Inhouse Lab
Rain Stability Time	4 hours	
Light Pedestrian Traffic Time	12 hours	Conditions: 20°C, 50% RH
Final Curing time	7 days	
Chemical Properties	Good resistance against acidic and alkali solutions (5%), detergents, seawater and oils.	





# LIQUID APPLIED POLYURETHANE WATERPROOFING MEMBRANE

# APPLICATION

#### **Surface Preparation**

Careful surface preparation is essential for optimum finish and durability.

The surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the membrane. Maximum moisture content should not exceed 5%. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa. New concrete structures need to dry for at least 28 days.

Old, loose coatings, dirt, fats, oils, organic substances and dust <u>need to be removed by a grinding machine</u>. Possible surface irregularities need to be smoothened. Any loose surface pieces and grinding dust need to be thoroughly removed. <u>WARNING</u>: Do not wash surface with water!

#### **Repair of cracks and joints:**

The careful sealing of existing cracks and joints before the application is extremely important for long lasting waterproofing results.

• Clean concrete cracks and hairline cracks, of dust, residue or other contamination.

• Clean concrete expansion joints and control joints of dust, residue or other contamination.

#### Priming

Prime absorbent surfaces like concrete, cement screed or wood

Prime non-absorbent surfaces like metal, ceramic tiles and old coatings. Allow the primer to cure according its technical instruction.







# LOCATION

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