



Dehumidification systems, water repellent treatments, thermo-acoustic insulation, waterproofing



Certified Quality System since **FEBRUARY 1993**

**From Project to Jobsite**

## PL-MONO tec – PL-MONO tec THIXO

### LIQUID WATERPROOFING MEMBRANE WHICH CURES BY REACTION WITH AIR MOISTURE

**Description** **PL- MONO tec** is a liquid one component, cold polymerizing, permanently elastic product used for highly long-lasting waterproofing.  
It cures by reaction with air and/or ground moisture (if limited).

- Characteristics and advantages**
- The product **PL-MONO tec** can be applied with a notched trowel, roller or spray.
  - With added with mixing 1÷4% of the product **REOTHIX 69**, a thixotropic version **PL MONO tec THIXO** is obtained which can be applied with a spatula in vertical or on soffits.
  - Easy to apply (roller or airless spray).
  - When applied it forms seamless membrane with no joints.
  - Adheres to concrete, mortar, metal, wood, plexiglass (for any other materials, please request the assistance of our Technical Services)
  - Water resistant.
  - Frost resistant.
  - It maintains its properties from -30°C to +90°C.
  - Crack-bridging up to 2 mm, even at -10°C.
  - Water vapour permeable.
  - Complete adhesion without any additional anchoring.
  - The waterproofed surface can be opened to traffic after enough curing.
  - Any damages or tears can be easily repaired locally within few minutes.
  - Low cost
- For any RAL color finish, apply **TECNOPAV PL 210** in 1 or 2 layers over **PL-MONO tec**, This application increases the resistance to wear and to stresses of pedestrian traffic.

- Fields of use**
- Waterproofing of Rooftops
  - Waterproofing of Balconies and Terraces
  - Waterproofing of Wet Areas (under-tile) in Bathrooms, Balconies, Kitchens, etc
  - For applications under tiles, scatter in the last layer of **PL MONO-tec**, while still fresh, dry quartz sand. Remove the excess not fixed after 24-36 hours before applying the tile adhesive **SUPERKOLL-tec 300**.
  - Protection of Polyurethane Foam Insulation
  - Waterproofing of Flowerbeds and Planter Boxes
  - Waterproofing and protection of Concrete constructions like Bridge-decks, Tunnels, etc.
  - Protecting and sealing (overlapping, combinations, cavities, passing objects, etc..) of metal sheet after proper preparation of the surface by sanding



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### Method of use **PREPARATION OF THE SUBSTRATE**

- 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. For excellent results, maximum moisture content should not exceed 5%. New concrete structures need to dry for at least 28 days. Old, loose coatings, dirt, fats, oils, organic substances and dust need to be removed by a grinding machine. Possible surface irregularities need to be smoothed. Any loose surface pieces and grinding dust need to be thoroughly removed.

**WARNING: Do not wash surface with water!**

#### **METHOD OF APPLICATION**

**Sealing of cracks:** The careful sealing of existing cracks and joints before the application of PL-MONO tec is extremely important for long lasting waterproofing results. Open cracks and repair with BS 38 MuCis<sup>®</sup> bicomponent. Incorporate reinforcement net in **PL-MONO tec** over the joint. Expansion joints need to be treated accordingly.

**Priming:** Prime absorbent surfaces like concrete, cement screed or wood with PRIMER SB MuCis<sup>®</sup>. Allow the primer to cure according its technical instruction.

#### **WATERPROOF MEMBRANE**

Stir well before using. Apply **PL-MONO tec** by spraying, brush or roller onto the primed surface, until all surfaces is covered.

Reinforce problem areas like wall-floor connections, chimneys, pipes, waterspouts (siphon), etc with net reinforcement.

After 12 hours (not later than 36 hours) apply another layer of the **PL-MONO tec**. If desired apply a third layer of the **PL-MONO tec**.

**RECOMMENDATION:** We recommend reinforcement of the entire surface, with reinforcement for roof applications. (Use 5-10 cm stripe overlapping).

**ATTENTION:** Do not apply **PL-MONO tec** over 0.6 mm thickness (dry film) per layer. For best results, the temperature during application and cure should be between 5°C and 35°C. Low temperatures retard cure while high temperature speed up curing. High humidity may affect the final finish.

#### **FINISHING**

**PL-MONO tec** can be left as such or, when a colour stable and chalking-free surface is desired, a decorative coat can be applied with **TECNOPAV PL 210**.

**Packaging and storage** **PL-MONO tec** is supplied in pail of 25 kg or 6 kg, which should be stored in dry and cool rooms for up to 9 months from the date of production mentioned on the label. Protect the material against moisture and direct sunlight. Storage temperature: 5-30°C. Products should remain in their original, unopened containers, bearing the manufacturers name, product designation, and batch number and application precaution labels.

**The lids of the boxes are hermetically sealed to preserve the product. Often, after some permanence in stock, this sealing tends to remove the lids more difficultly. In these cases, after removal of the lids, these can mostly not be used again. Therefore, even when the lid comes off normally, once the packaging opened it is OBLIGATORY TO USE ALL THE CONTENT: otherwise the product shall start to polymerize and skin in a short time in the can.**

**Standard colour** White or grey

**Consumption** 1,5 – 2,5 kg/m<sup>2</sup> applied in two or three layers.  
This coverage is based on application by roller onto a smooth surface in optimum conditions.



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Technical characteristics (typical values)

PROPERTIES	RESULTS	TEST METHOD
• Elongation at break	910 ± 80 %	ASTM D 412
• Tensile strength	7,50 ± 0,40 N/mm <sup>2</sup>	ASTM D 412
• Water vapour permeability	25 ± 4,6 gr/m <sup>2</sup> /day	ISO 9932:91
• Resistance to water pressure	no leak (1m water column, 24h)	DIN EN 1928
• Adhesion to concrete	>2,2 N/mm <sup>2</sup> (concrete failure)	ASTM D 903
• Adhesion to steel	> 2 N/mm <sup>2</sup>	EN 1542
• Hardness (Shore A)	69 ± 5	ASTM D 2240 (15")
• Class of fire reaction for construction materials	B2	DIN 4102-1
• Resistance to sparks or radiating heat	passed	DIN 4102-7
• Stability time with rain	4 hours	Conditions: 20°C, 50% RH
• Time for light pedestrian traffic	12 hours	
• Final curing time	7 days	
• Chemical properties	Good resistance against acid and alkali solutions (10%), detergents, seawater and oils.	

**Safety indications** **PL-MONO tec** contains isocyanates. See information supplied by the manufacturer. Please read the Material Safety Data Sheet.

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