

Sheet:

Cod.7016

MEMBRANA PW-Ecoterm

Thermo-insulating, anti-corrosive polyurethane membrane suitable as a finishing layer in exposed waterproofing systems.

- ECO-TERM, is applicable on surfaces where it is desired to obtain waterproof, thermal insulation
- acoustic problems, or solve condensation problems while absorbing cracks.
- It has a direct application in: homes, food industries (canneries, pastry shops, cheese factories, etc.); restaurants, bars, etc.



PRODUCT DESCRIPTION

The **MEMBRANE PW-Ecoterm** is a water-resistant product that is easy to apply.

Due to its particular and innovative characteristics, it is a revolutionary novelty in the waterproofing membrane market:

- Firstly, because of its waterproofing protection, which makes it an ideal product for walls with permeability problems, or where there are cracks or you want to provide long-lasting waterproofing protection.
- Secondly, because of its thermally insulating properties, anti-noise as a result of the inclusion of a system of hollow glass microspheres that replace the usual materials of a mineral nature, it is an easily applicable membrane.

Its elastic-waterproof product characteristics make it withstand cracks of up to 1 mm, provide good mechanical properties and provide excellent waterproofing and elasticity to the substrate that prevents cracking.

Its low thermal conductivity acts as a retaining wall, preventing or minimizing temperature changes across the surface, retaining heat and preventing external penetration, both heat and cold.

All this contributes to a pleasant thermal environment, both in winter and summer, and appreciable energy savings, which allow us to qualify our **MEMBRANE PW-Ecoterm** as a thermal insulating membrane.

The total structure of our applied membrane is equivalent to two separate films of paint that enclose, between the two, an air chamber, made up of all the hollow glass microbubbles.

This, together with the considerable thickness of the applied layer -minimum 500 microns- makes the **MEMBRANE PW-Ecoterm** capture the temperature, deflect it and project it inside the premises, the paint acquiring the temperature of the same.

The fact that the **MEMBRANE PW-Ecoterm** acquires the ambient temperature prevents condensation in the adverse seasons of autumn and winter, thus preventing the appearance of surface alterations, stains and humidity. Special additives reinforce this anti-humidity action, which is so important from both a hygienic and aesthetic point of view. The **MEMBRANE PW-Ecoterm** thus fulfills a second function, that of being: ANTI-HUMIDITY paint. From a structural point of view, in section, the **MEMBRANE PW-Ecoterm** is presented to us as a set of hollow and thin-walled glass microbubbles. These bubbles come in different sizes in order to achieve a compact mass, whose small spaces between bubbles are filled by the paint vehicle.

This structure, compact and hollow at the same time, produces a dampening effect of sound waves, creating a peaceful environment due to the attenuation of internal and external sounds.

Thus, we contemplate a third property of the **MEMBRANE PW-Ecoterm**: its ANTI-SOUND quality..

PRESENTATION

The **MEMBRANE PW-Ecoterm** is available in 20 kg plastic trays in White

STORAGE CONDITIONS

12 months from the date of manufacture, in its well-closed and non-deteriorated containers of origin, in a dry place at temperatures between +5° C and +30°

TECHNICAL DATA

Chemical Basis	Aliphatic polyurethane prepolymers
Aspect:	Satin
Color:	White
Density:	0,99 +- 0,02K/l
Dilution:	Water
Drying:	2 hours at 20° C and 60% relative humidity
Dry to the touch:	8 hours at 20° C and 60% relative humidity
Repainted:	Minimum 12 hours at 20°C (It is advisable to wait 24 hours)
Aplicación:	BRUSH 10-20%; ROLLER 5-10%; GUN: 20-25% (wide-mouth projection guns) It is recommended to use a 1st coat with a brush without going over too much.
Theoretical performance:	1.5 m ² /litre per coat. Apply at least 3 coats to obtain 500 microns
COV's:	Complies with Directive 2004/42/EC (RD 22/2006) Annex I subcategory j): 304.8 g/l (500 g/l maximum as of 01.01.2010).

APPLICATION SURFACES

The **MEMBRANA PW-Ecoterm** is applicable on surfaces where it is desired to obtain waterproof, thermal or acoustic insulation, or to solve condensation problems while absorbing cracks. Thus, it has a direct application in: homes, food industries (canneries, pastry shops, cheese factories, etc.); restaurants, bars, etc.

HOW TO USE

Temperatura de trabajo: No inferior a +5°C. Humedad relativa no superior al 80%. Preparación de las superficies:

FOREIGN

New construction (concrete):

1. Allow the concrete to set completely.
2. Remove setting slurry, soluble salts, dust, grease and other contaminants by mechanical or manual procedures.
3. Apply a coat of "Water Sunset" or 25% dissolved waterproofing with water. Leave to dry for 2-4 hours at 20°C.
4. Apply two or more coats of **MEMBRANA PW-Ecoterm**. Allow to dry for at least 12 hours between coats. Restoration & Maintenance:
5. Remove old waterproofing in poor condition, dirt, dust, etc.
6. Apply a coat of "Solvent Sunsol". Leave to dry for 6-8 hours at 20°.
7. Apply two or more coats of **MEMBRANA PW-Ecoterm**. Allow to dry for at least 12 hours between coats.

INTERIORS

1. On new, solid and dry surfaces (cement, plaster, plaster, etc.): The **MEMBRANA** can be applied
2. **PW-Ecoterm**
3. On soft or highly absorbent surfaces, tempera, lime, old paints, etc.: Apply PAVIFER-305 water-based primer beforehand. Then the **MEMBRANA PW-Ecoterm**.
4. On iron, zinc, etc.: In the case of ferrous metals, previously remove rust, calamine, grease, etc., by any traditional mechanical method or sandblasting. Then give a hand of our MULTIFUNCTIONAL EC imimitation Then apply the **MEMBRANA PW-Ecoterm**. In the case of zinc or light alloy surfaces, prior to the application of the **MEMBRANA PW-Ecoterm** our anti-rust primer for galvanizing MULTIFUNCTIONAL EC
5. Application: Apply the first coat, preferably with a brush, without being abundantly and trying not to insist too much, to avoid damaging the product. Apply the following coats until the minimum thickness of the applied paint is 500 microns.

APPLICATION DETAILS

Quality of support	The concrete substrate must be compact and have minimum compressive strengths of 25 N/mm ² and tensile strength of 1.5 N/mm ² . The substrate must be clean, dry and free of all types of contaminants, such as oils, greases, coatings and surface treatments, etc. When in doubt, apply a test area.
Preparing the Stand	Concrete substrates must be prepared by mechanical means (sanding, shot blasting, or scarifying) in order to remove surface grout and obtain an open-pore, textured surface. The weak parts of the concrete must be eliminated and all possible defects in the substrate must be discovered. Repairs to the support, filling of cavities and levelling of the support will be carried out with appropriate products. The substrate must be primed or leveled to obtain a compact surface. Large stains should be removed by sanding. All dirt as well as loose or poorly adhered parts should be removed before application, preferably by sweeping or vacuuming.
Temperature of the support	Minimum + 10 °C / Maximum + 30 °C
Ambient Temperature	Minimum + 10 °C / Maximum + 30 °C
Substrate humidity	≤ 6% by weight Measured with method, CM gauge or kiln drying method. There should be no rising damp according to the ASTM standard (polyethylene sheet).
Relative humidity	Maximum 75% r.h. Proper ventilation should be ensured to remove excess moisture during curing.
Dew point	Watch out for condensation! The substrate and ambient temperature should be at least 3°C above the Dew Point during application.

REMARKS

Storage: Up to one year in frost-protected locations. If the container has been opened, close it tightly and use the contents within 30 days. Use: Before application, the contents of the container must be thoroughly homogenized by hand and slowly. When the product is very diluted and has been left to rest, a separation occurs, tending to place the microbubbles on the surface, in this case unify as indicated in the previous paragraph. Thickness: Considering that the thermal-insulating, anti-condensation and anti-noise properties increase in direct relation to the paint thickness applied, the requirements required in each case must be taken into account. In the areas most exposed to condensation (inside windows, angles, etc.), apply a greater thickness. To facilitate the obtaining of high thicknesses, apply at a higher viscosity than normal Other specific situations not contemplated in this sheet, consult our Technical Commercial Service.

LEGAL NOTICES

This information and, in particular, the recommendations regarding the application and end use of the product, are given in good faith, based on the current knowledge and experience of POLIUREA SISTEMAS of the products when they are correctly stored, handled and applied, in normal situations, within their useful life, in accordance with the recommendations of POLIUREA SISTEMAS. Possible differences in materials, substrates and actual conditions at the place of application are such that no warranty in terms of merchantability or fitness for particular purposes, or any other written advice or advice offered, can be inferred from the information herein, nor from any other written advice or advice offered.

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