# DRYLASTIC

TWO-COMPONENT CEMENT/POLYMER LIQUID MEMBRANE HIGHLY ELASTIC, FOR WATERPROOFING AND PROTECTING CONCRETE STRUCTURES

COMPLIANT WITH NORMS EN 1504-2 AND EN 14891



DRYKOS

# **PRODUCT DESCRIPTION**

DRYLASTIC is a two-component liquid waterproofing cementitious membrane with low elastic modulus, based on binders, micronized cements modified with special synthetic polymers in aqueous dispersion, and selected aggregates with fine particle size. Thanks to the use of special synthetic resins, the hardened layer of DRYLASTIC remains stably and consistently elastic under all environmental conditions and is not chemically attacked by de-icing salts, sulfates, chlorides, and carbon dioxide. DRYLASTIC is suitable for the protection of potential crack areas. Its excellent initial and final adhesion allows for application on both vertical and horizontal surfaces.

DRYLASTIC adheres to concrete, masonry, and plastered surfaces as long as they are solid and properly cleaned.

DRYLASTIC also adheres to marble, ceramics, and membranes, if properly primed.

DRYLASTIC is not a decorative material but ensures the waterproofing of cracks and crevices.

#### **FEATURES**

- Durable elastic waterproofing barrier.
- Resistant to chemical aggression from de-icing salts, seawater, sulfates.
- Protects against carbon dioxide penetration.
- UV-resistant.
- Elastic at both low and high temperatures.
- Vapor-permeable.
- No long maturation times required.
- Suitable for contact with potable water (Legislative Decree 31/2001).

# **ADVANTAGES**

DRYLASTIC is easy to apply, has high crack-bridging capabilities, creating a waterproof coating even without the use of reinforcement (for areas up to 15 m2).

DRYLASTIC's high adhesion capability allows for application on almost all types of substrates such as concrete, cement mortar, stone, ceramics, bricks, and wood.

DRYLASTIC is a cohesive product that allows vertical application without the need for special application techniques (hard-bristle brush).

# **AREAS OF APPLICATION**

- Waterproofing of concrete tanks for water containment.
- Waterproofing of bathrooms, showers, balconies, tanks, terraces, pools, etc. before laying ceramic coverings.
- Waterproofing of curved or variable geometry surfaces.
- Waterproofing of old tiles before laying a new covering.
- Protective and anti-carbonation, flexible coating for cementitious surfaces, including those damaged by plastic or hydraulic shrinkage.
- Flexible coating for cementitious structures, even subject to flexural deformation.

#### **GREEN TECHNOLOGY**

Component B of DRYLASTIC does not contain APEO (Alkylphenol ethoxylate), formaldehyde, ammonia, or VOC, and does not generate dust during mixing, thus safeguarding the health of applicators.



#### SURFACE PREPARATION

The surface of the concrete must be thoroughly cleaned before applying the product.

It is recommended to brush the surface to be treated and blow compressed air or wash with a pressure washer to remove andeliminate dust and all loose parts, including those that could come off. If there are areas contaminated with oils, fuels, grease, or pre-treatments, they must be cleaned before application using suitable products or sandblasting. Any gravel nests, cracks, horizontal and vertical joints must be repaired and/or treated beforehand. Before applying DRYLASTIC, saturate the surface to be treated with water and allow it to dry until it is damp, eliminating any water stagnation.

#### **PRODUCT PREPARATION**

Pour component B (liquid) into the container provided; then slowly add component A (powder), mixing with a mechanical stirrer. Mix at a low speed for several minutes, avoiding the formation of lumps and ensuring that any undispersed powder is removed from the container's walls and bottom.

Mixing should continue until the mixture is completely homogeneous. Let it rest for about 3 minutes and mix briefly again before application. Use a mechanical stirrer at a low speed to avoid excessive air incorporation. Avoid preparing the mixture manually.

# CONSUMPTION

For manual application: ~1.0 kg/m<sup>2</sup> per coat, in two coats. For spray application with a plaster sprayer: ~1.1/1.2 kg/m<sup>2</sup> per coat, in two coats. These consumption rates refer to the application of a continuous film on a flat surface; if the substrate is uneven, the dosage will increase to approximately 1.2 kg/m<sup>2</sup> per coat or more. For surfaces larger than 15 m<sup>2</sup>, it is recommended to place the elastic polypropylene mesh DRYLASTIC (from 60/75 g/m<sup>2</sup>) between the still fresh first coat and the second coat; in this case, the dosage will be approximately 2.5 kg/m<sup>2</sup> for the two coats.

#### **APPLICATION METHOD**

DRYLASTIC is normally applied with a roller, brush, trowel, or suitable spraying device, in at least 2 coats for a total thickness of about 2 mm. Given the product's consistency, no more than 1 mm needs to be applied in a single coat. Apply the second coat while the surface of the first coat is still damp. Wait about 4-6 hours between the two coats. The second coat must not damage the first coat and should be applied perpendicular to the first coat.

Do not apply at temperatures below +5°C or on frozen substrates. In hot weather, avoid exposing the material to sunlight before use.

After application, in particularly dry, hot, or windy conditions, it is advisable to cover the surface with polyethylene sheets to prevent too rapid evaporation.

Due to DRYLASTIC's high adhesion even to metal, it is recommended to wash the tools with water before the product sets.

#### **TREATMENT AFTER APPLICATION**

If used for waterproofing drinking water tanks, the treated surfaces (walls, ceiling, floor, columns, stairs) must be washed with drinking water before final filling. Do not use pressure washers. Then remove all the water used for cleaning. Filling can be done when the surface treatment is sufficiently hardened, normally no sooner than 14 days after application. If filling is required in shorter times, filling can be done no lesser than 7 days, but only after verifying that the surface is completely hardened.

# LIMITATIONS

- Do not apply DRYLASTIC with water-soaked tools or tools contaminated with other products.
- Do not apply DRYLASTIC at temperatures below 5°C or when rain or frost is imminent (within the next 48 hours).
- Ensure that DRYLASTIC has sufficient curing time (2-4 days) before the possible occurrence of rain or snow. If the forecast indicates this, cover the treated surfaces with polyethylene sheets.
- For best results, the temperature during application should be between 5°C and 35°C. Low temperatures delay drying and polymerization, while high temperatures accelerate them.
- In hot climates, always apply the product when the ambient and substrate temperatures are dropping (towards evening).
- When fully dry, DRYLASTIC can be tested for impermeability by covering it with 50 mm of water for a maximum period of 24 hours.
- The product consumption indications are average indicative values, which may vary in specific cases.
- DRYLASTIC should mainly be used for exterior applications and is not suitable for use in basement areas.
- Always check the slopes of terraces and roofs where DRYLASTIC is applied to avoid continuous water stagnation on its surface.
- The above information is based on our experience and knowledge. It is advisable to consult our technical staff in specific cases.



#### **HEALTH AND SAFETY**

DRYLASTIC contains chemical agents that may cause skin irritations. It is recommended to use gloves, goggles, and a mask when handling the product and to follow normal precautions for handling chemical products. For further and comprehensive information regarding the safe usage of the product, it is recommended to consult the Safety Data Sheet.

#### STORAGE

Cold temperatures could cause crystallization of component B of the product; in this case, simply shake it in a warmer environment. Do not expose the product to sunlight or heat sources. DRYLASTIC should be stored in its sealed packaging and used within 12 months. The product must not freeze, as it will be damaged.

#### WARRANTY

If the product is found to be defective, Drykos's liability is limited to the replacement of the product itself. Since Drykos does not have control over the user's use of the product, it is the user's responsibility to ensure that the product is suitable for the intended use, assuming all risks and responsibilities related to it.

#### PACKAGING

The product is packaged in 25 kg buckets containing:

- · Component A (powder): polyethylene bag of 17 kg.
- $\cdot$  Component B (liquid): polyethylene pouch with a cap of 8kg.

# **TECHNICAL DATA**

STANDARD EN 1504-2			
Test description	Test methods	Requirements in accordance with EN 1504-2	DRYLASTIC
Permea bility to CO <sup>2</sup>	EN 1062-6	SD > 50 m	214 m
Direct traction adhesion test	UNI EN 1542	For flexible systems without traffic: ≥ 0.8 with traffic: ≥ 1.5	1,7
Water vapor permeability	EN ISO 7783-1	Class I SD <5m (permeable) Class II 5m< SD <50m Class III SD >50 m (not perm.)	Class I Sd 2,4 m
Capillary absorption and permeability to liquid water	EN 1062-3	≤0,50 kg·m -2 ·h -0,5	≤0,41 kg·m -2 ·h -0,5



STANDARD EN 14891			
Test description	Test methods	Requirements in accordance with EN 14891	DRYLASTIC
Permeability to water under pressure (1.5 bar for 7 days of positive thrust)	EN 14891-A.7	NO PENETRATION	NO PENETRATION
Crack bridging capability at 23°C	EN 14891-A.8.2	≥ 0,75 mm.	2,3 mm.
Crack bridging capability at - 20° C	EN 14891-A.8.3	≥ 0,75 mm.	0,98 mm.
Initial adhesion (N/mm²)	EN 14891-A.6.2	≥ 0,5	0,9
Adhesion after immersion in water (N/mm²)	EN 14891-A.6.3	≥ 0,5	0,6
Adhesion after heat action (N/mm	EN 14891-A.6.5	≥ 0,5	1,0
Adhesion after freeze-thaw cycles(N/mm²):	EN 14891-A.6.6	≥ 0,5	0,6
Adhesion after immersion in chlorinated water (N/mm²):	EN 14891-A.6.8	≥ 0,5	0,7
Adhesion after immersion in basic water (N/mm²):	EN 14891-A.6.9	≥ 0,5	0,7

# **OTHER TECHNICAL DATA**

Elongation at break	180-235 %	
Tensile Strength	1,4 Mpa	
Resistance to bending	9,7 N/mm2	
Dry to touch	2,5 hours	
Completely dry	6 hours	
Fire reaction	Class E	



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