

HYPERDESMO®-ADY 610



ETA-24/0746

One component, non-yellowing, elastic, polyurethane liquid membrane

DESCRIPTION

HYPERDESMO®-ADY 610 is a one-component, fully aliphatic polyurethane liquid membrane that cures to form a tough yet highly elastic and non-yellowing film. Designed for applications where color stability and long-term aesthetics are critical, the product offers the added advantage of single-coat application, helping to reduce labor costs and minimize application errors commonly associated with multi-layer systems.

It features a self-leveling formulation with a stable viscosity profile across a wide temperature range, ensuring a smooth, bubble-free surface. The membrane maintains its color integrity even in dark shades and demonstrates excellent solar reflectance when applied in white, making it ideal for exposed applications subject to intense sunlight. Once cured, the membrane is also suitable for light pedestrian traffic.

Apply using brush, roller, or airless spray. Consumption: 1.5–2.0 kg/m² in one coat. For use as topcoat over other HYPERDESMO waterproofing membranes: Approx. 0.5 kg/m².

COMPLIANCE - CERTIFICATION

HYPERDESMO®-ADY 610 is **CE** certified: **2928-CPR-111 & 55** according to the European Standard **EN 1504-2** and **ETA-24/0746** according to the European Standard **EAD 030350-00-0402**.

RECOMMENDED FOR

- roofs,
- verandas and balconies,
- polyurethane insulation foams,

- light roofing made of metal or fibrous cement,
- gypsum and cement boards,
- asphalt and EPDM membranes.

LIMITATIONS

Not recommended for:

Unsound substrates.

Waterproofing of swimming pool surfaces in contact with chemically treated water.

FEATURES & BENEFITS

- Excellent weather and UV resistance, no yellowing (it is fully aliphatic). SRI (Solar Reflectance Index) for the white color is 105 as per ASTM E-1980.
- Low viscosity.
- Excellent mechanical properties, high elasticity, tensile and tear strength.
- Highly hydrophobic.
- Excellent chemical and hydrolysis resistance.

APPLICATION PREREQUISITES

Can be successfully applied on:

Concrete/steel reinforced concrete or otherwise, fibrous cement, mosaic, cement roof tiles, old (but well adhered) acrylic and asphalt coats, wood, corroded metal, and galvanized steel. For information about other substrates, please contact our tech department.

Concrete substrate conditions (standard):

- Strength: C20/25.
- Humidity: W 5%.
- Temperature: 5-35 °C.
- Relative humidity: < 85%.

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Primer selection for special conditions and substrates:

Please refer to the **Primer Selection Table**.

APPLICATION PROCEDURE

Clean the surface using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes must be removed. Fill surface irregularities with appropriate products.

Priming:

Apply the required primer following the guidelines above.

Mixing:

Use a low speed (300 rpm) mixer. Add SOLVENT-01 10% for application by spraying.

Application:

By brush, roller or airless spraying. If applied in sequel layers, do not exceed 48 hours between coats.

CONSUMPTION

Minimum consumption: **1.5 kg/m²**.

CLEANING

Clean tools and equipment first with paper towels and then using SOLVENT-01. Rollers will not be re-usable.

PACKAGING

1 kg, 6 kg and 15 kg drums.

SHELF LIFE

Can be kept for minimum 12 months in the original unopened pails in dry places and at temperatures of 5-25 °C. Once a pail has been opened, use as soon as possible.

SAFETY INFORMATION

Contains volatile flammable solvents. Apply in well-ventilated, no smoking areas, away from naked flames. In closed spaces use ventilators and carbon active masks. Keep in mind that solvents are heavier than air so they creep on the floor. The MSDS (Material Safety Data Sheet) is available on request.

TECHNICAL SPECIFICATIONS

In liquid form:

PROPERTY	UNITS	METHOD	SPECIFICATION
Viscosity (BROOKFIELD)	cP	ASTM D4287, @ 25 °C	1,000-3,000
Specific weight	gr/cm ³	ASTM D1475 / DIN 53217 / ISO 2811, @ 20 °C	1.3-1.4
Tack free time, @ 77 °F (25 °C) & 55% RH	hours	-	6-12
Recoat time	hours	-	24

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Cured membrane:

PROPERTY	UNITS	METHOD	SPECIFICATION
Service temperature	°C	-	-40 to 90
Max. temperature short time (shock)	°C	-	200
Hardness	Shore A	ASTM D2240/DIN 53505 / ISO R868	80
Tensile strength at break @ 23°C	Kg/cm ² (N/mm ²)	ASTM D412/ EN-ISO-527-3	90 (9)
Percent elongation @ 23 °C	%	ASTM D412/ EN-ISO-527-3	> 600
Thermal resistance (100 days @ 80 °C)	-	EOTA TR011	passed
QUV Accelerated Weathering Test	-	ASTM G53	passed (2000 hours)


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ALCHIMICA S.A. 7 Lampsakou Str, ATHENS – GREECE 2928-CPR-111 & 55
EN 1504-2: 2004 2928 HYPERDESMO® ADY-610 Surface Protection Products – Coating www.alchimica.com

Essential characteristics	Performance	Harmonized technical specification
Permeability to CO ₂	S _D >50 m	EN 1504-2:2004
Permeability to water vapor	S _D <5 m Class I (permeable)	
Capillary absorption & permeability to water	W<0.1 kg/m ² ·h ^{0.5}	
Adhesion strength by pull-off test	≥1.5 (1.0) N/mm ²	
Reaction to fire	Euroclass E	EN 13501-1
External fire performance	Broof (t1 - t4)	EN 13501-5

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ALCHIMICA S.A.

7 Lampsakou Str, ATHENS – GREECE

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EAD 030350-00-0402

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Liquid Applied Roof Waterproofing Kit, based on Polyurethane

Essential characteristics	Performance	Relevant clauses in EAD (Test standards)	Harmonized Technical Specification
External Fire Performance of roofs*	B _{Roof} (t ₁) - (t ₄)	EAD 030350-00-0402, Clause 2.2.1 (Acc. ENV 1187 & Acc. EN 13501-5)	EAD 030350-00-0402
Reaction to Fire	C, s2 d0	EAD 030350-00-0402, Clause 2.2.2 (Acc. 13501-1)	
Resistance to water vapour	$\mu = 2070$ (2.14 mm thickness)	EAD 030350-00-0402, Clause 2.2.4 (Acc. EN 1931)	
Watertightness	Watertight	EAD 030350-00-0402, Clause 2.2.5	
Resistance to mechanical damage (perforation)	P1-P4	EAD 030350-00-0402, Clause 2.2.7	
Resistance to fatigue movement	W3 1000 cycles (-10 °C) Pass	EAD 030350-00-0402, Clause 2.2.8	
Resistance to the effects of low and high surface temperatures	Low temperatures: TL3 High temperatures: TH4 – TH1	EAD 030350-00-0402, Clause 2.2.9	
Resistance to heat ageing	W3, S (severe) (200 days at 80 °C)	EAD 030350-00-0402, Clause 2.2.10.1	
Resistance to water ageing	W3, S1-S2, P4 (180 days at 60 °C)	EAD 030350-00-0402, Clause 2.2.10.3	
Resistance to UV radiation in the presence of moisture	W3, S (severe) (5000 hours)	EAD 030350-00-0402, Clause 2.2.10.2	

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Release of Dangerous Substances	NPA	EAD 030350-00-0402, Clause 2.2.3	
Slipperiness	NPA	EAD 030350-00-0402, Clause 2.2.14	

* According to the various roof slopes conditions on non-combustibles support specified in ETA 24-0746

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