HYPERDESMO®-PB-MONO

One component, polyurethane - bitumen liquid membrane for flashing, waterproofing & protection.

DESCRIPTION

HYPERDESMO®-PB-Mono is a quick curing, one component, thixotropic, bitumen-extended polyurethane fluid. It produces a hydrophobic, elastic membrane with very strong adhesion to most types of substrates, as well as bituminous and excellent mechanical and chemical resistance properties. It is ideal for application on vertical surfaces: No running, no bubbling.

It is based on pure elastomeric hydrophobic polyurethane resin and is extended with chemically polymerised virgin bitumen.

Apply with brush or spatula. Total consumption: 2.0 kg/m^2 in one or two coats.

RECOMMENDED FOR

Waterproofing and protection of:

- Gypsum and cement boards,
- asphalt membranes (for repair also),
- cementitious substrates,
- roofs,
- concrete/steel reinforced concrete or otherwise,
- light roofing made of metal or fibrous cement,
- basements, foundations,
- planter boxes
- closed spaces with high humidity.

LIMITATIONS

Not recommended for unsound substrates or UV-exposed applications.

FEATURES & BENEFITS

- Economic
- Thixotropic: Easily applied on vertical surfaces and complex shapes without running or bubbling.
- Excellent adhesion on almost any type of surface, with or without the use of special primers.
- Excellent thermal resistance, the product never turns soft. Max service temperature 80 °C, max shock temperature 150 °C.
- Resistance in the cold: The film remains elastic even down to -40 °C.
- Outstanding mechanical properties, high elongation, tensile and tear strength, high abrasion resistance.
- Excellent chemical resistance.
- Effective humidity barrier.
- Effective radon gas barrier.

APPLICATION PREREQUISITES

In general, **HYPERDESMO®-PB-Mono** has excellent adhesion to most types of substrates, as well as bituminous, without the use of primers. Nevertheless, testing before use is strongly advised. Please contact our technical department for further information.

Standard concrete substrate conditions

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

Primer selection for special conditions and substrates:

Although the material has excellent adhesion on most common construction substrates, suitable primers are:

AQUADUR, **AQUASMART®-DUR**: For strong concrete or in cases of damp wet concrete.

MICROSEALER-50: In cases of porous concrete.

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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 the appropriate product.

Application:

Apply with brush, spatula, or airless spray.

CONSUMPTION

Total consumption: **2 kg/m²** in one or two coats.

CLEANING

Clean tools and equipment first with paper towels and then using SOLVENT-01.

PACKAGING

1 Kg, 5Kg, 20Kg

SHELF LIFE

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

SAFETY INFORMATION

Contains a small quantity of 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 (before application):

PROPERTY	UNITS	METHOD	SPECIFICATION
Viscosity (Brookfield)	cP	ASTM D2196-86, @ 25 °C	8,000-20,000
Specific weight	gr/cm³	ASTM D1475 / DIN 53217 / ISO 2811, @ 20 °C	1.20-1.30
Flash point	°C	ASTM D93, closed cup	42
Tack free time, @ 77 °F (25 °C) & 55% RH	hours	-	1-2
Recoat time	hours	-	6-24

The cured membrane:

PROPERTY	UNITS	METHOD	SPECIFICATION
Service temperature	°C	-	-40 to 80
Max. temperature short time (shock)	°C	-	150
Hardness	Shore A	ASTM D2240 / DIN 53505 / ISO R868	35

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Tensile strength at break @ 23 °C	Kg/cm² (N/mm²)	ASTM D412 / EN-ISO-527-3	50 (5)	
Percent elongation @ 23 °C	%	ASTM D412 / EN-ISO-527-3	> 400	
Adhesion to concrete	kg/cm² (N/mm²)	ASTM D4541	Without primer: >0.5 N/mm² (EOTA minimum requirement)	With primer: >2 N/mm²
Thermal resistance (200 days @ 80 °C)	-	EOTA TR011	passed	
QUV Accelerated Weathering Test (4hr UV, @ 60 °C (UVB-Lamps) & 4hr COND @ 50 °C)	-	ASTM G53	passed (1000 hours)	
Chemical resistance (Sodium Hypochlorite NaOCI 5% 10 days)	-	-	unaffected	
Hydrolysis resistance (Potassium Hydroxide 8% 10 days @ 50 °C)	-	-	unaffected	
H_2O absorption (10 days)	-	-	< 1.5%	

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