HYPERDESMO®-PB-1K FC

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

DESCRIPTION

HYPERDESMO®-PB-1K FC is a very fast throughout curing, one component, self-leveling bitumen-extended polyurethane liquid membrane. The product, although fast curing, does not exhibit bubbling during the curing process even at high temperatures and humidity in the atmosphere. **HYPERDESMO®-PB-1K FC,** although fast curing, displays excellent adhesion to most types of substrates, even bituminous.
It is based on pure elastomeric hydrophobic polyurethane resin and is extended with chemically polymerised virgin bitumen. The product complies with **ASTM C836**.

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

COMPLIANCE - CERTIFICATION

The product is **CE** certified according to the European Standard **EN:1504-2:2004 (**2928-CPR-111)

RECOMMENDED FOR

Waterproofing and protection of:

- basements
- foundations
- roofs (inverted roof insulation build ups)
- planter boxes - Consumption 2.5kg/m2
- concrete/steel reinforced concrete or otherwise
- under tile waterproofing such as balconies and wet rooms
- polyurethane insulation foams
- general purpose-heavy duty jobs

LIMITATIONS

Not recommended for unsound substrates or UV-exposed applications.

FEATURES & BENEFITS

- Very economic
- Very fast curing even at low temperatures and low humidity
- Minimal bubbling formation
- Allows multi-layer application
- 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.

APPLICATION PREREQUISITES

HYPERDESMO®-PB-1K FC 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%.

HYPERDESMO®-PB-1K FC

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.

The contents of the pail should be thoroughly mixed with a mechanical mixer to ensure the product is completely homogenized before application. Prolonged storage may induce slight sedimentation and/or separation that must be re-homogenized.

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, 5 kg, 25 kg

SHELF LIFE

Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25 ºC. 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 ºC	4,000-6,000
Specific weight	gr/cm³	ASTM D1475 / DIN 53217 / ISO 2811, @ 20 ºC	1.25-1.35
Flash point	ºC	ASTM D93, closed cup	30
Tack free time, @ 77 ºF (25 ºC) & 55% RH	hours	-	1-2 hours
Recoat time	hours	-	6-24

HYPERDESMO®-PB-1K FC

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	
Tensile strength at break @ 23 °C	Kg/cm^2 (N/mm^2)	ASTM D412 / EN-ISO-527-3	>20 (>2)	
Percent elongation @ 23 °C	%	ASTM D412 / EN-ISO-527-3	> 800	
Adhesion to concrete	kg/cm^2 (N/mm^2)	ASTM D4541	Without primer: >0.5 N/mm^2 (EOTA minimum requirement)	With primer: >2 N/mm^2
Thermal resistance (200 days @ 80 °C)	-	EOTA TR011	passed	
H_2O absorption (10 days)	-	-	< 1.0%	

HYPERDESMO®-PB-1K FC

CE
21
ALCHIMICA A.E. 7 Lampsakou, Athens, Greece
2928-CPR-111
EN 1504-2:2004 2928 HYPERDESMO® PB-1K-FC Concrete surface protection systems – Coating
www.alchimica.com

Essential characteristics	Performance	Harmonized technical specification
CO_2 permeability, m	s_D > 50	EN 1504-2:2004
Permeability to water vapor, m	s_D < 5, class I	
Capillary absorption, kg/m^{2}·h$^{0.5}$	w< 0.1	
Bond strength by pull-off test, N/mm^2	≥ 1.5	
Impact resistance, N	≥ 4, class I	
Reaction to fire	Euroclass F	

NONE OF OUR PUBLISHED INSTRUCTIONS AND SPECIFICATIONS, IN WRITING OR OTHERWISE, ARE BINDING EITHER IN GENERAL OR WITH RESPECT TO ANY THIRD PARTY RIGHTS, OR DO THEY RELIEVE INTERESTED PARTIES OF THEIR DUTY TO SUBJECT THE PRODUCT TO AN ADEQUATE EXAMINATION OF ITS SUITABILITY. IN NO EVENT WILL ALCHIMICA S.A. BE RESPONSIBLE FOR DAMAGES OF ANY NATURE, WHATSOEVER, RESULTING FROM THE USE OF OR RELIANCE UPON INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS. ALCHIMICA S.A. RESERVES THE RIGHT TO CHANGE AT ANY TIME THE PROPERTIES OF ITS PRODUCTS. PLEASE REFER TO THE CURRENT VERSION OF THE TECHNICAL DATA SHEET, AVAILABLE FROM OUR WEB SITE WWW.ALCHIMICA.COM

