

HYPERDESMO®-F (Flashing)

Polyurethane water-thinable liquid membrane for waterproofing & protection.

DESCRIPTION

HYPERDESMO®-F is a unique product, the result of extensive research by ALCHIMICA's technical team. It is part of the **HYPERDESMO® System**, however, this particular variant is, optionally, water-thinable. It produces a strong elastic film with excellent adhesion to different surfaces. It contains a small percentage of SOLVENT-01. The addition of water into the product produces a thixotropic emulsion which cures quickly.

It is based on pure elastomeric hydrophobic polyurethane resin plus special inorganic fillers, which result in excellent mechanical, chemical, thermal, UV and natural element resistance properties.

Apply with brush, roller or airless spraying in two coats. Minimum total consumption: 1.2-1.5 kg/m².

COMPLIANCE

The product complies with the EU guideline for this type of materials, EOTA (European Organization of Technical Approval).

RECOMMENDED FOR

Waterproofing and protection of:

- Gypsum and cement boards,
- polyurethane insulation foams,
- light roofing made of metal or fibrous cement,
- asphalt membranes,
- EPDM membranes,
- tiles,
- bathrooms,
- verandas and balconies,
- roofs,

- foundations & basements.

LIMITATIONS

Not recommended for:

- unsound substrates,
- waterproofing of swimming pool surfaces in contact with chemically treated water,
- application in thick coats. Excessive thickness may cause adhesion problems.



When used in dark colours for exposed use, a protective topcoat of **HYPERDESMO®-ADY-E** (always pigmented) is required.

FEATURES & BENEFITS

- Thixotropic effect: Excellent for vertical substrates and PU foam protection.
- Fast curing, even during winter.
- Excellent adhesion on almost any surface, with or without the use of special primers.
- Excellent weather and UV resistance.
- Excellent thermal resistance, the product never turns soft. Max service temperature 80 °C, max shock temperature 200 °C.
- Resistance in the cold: The film remains elastic even down to -40 °C.
- Excellent mechanical properties, high tensile and tear strength, high abrasion resistance.
- Good chemical resistance.
- Absolutely non-toxic after full cure, may even be used for drinking water tank impermeabilisation.
- Moisture vapor transmission: The film breathes so there is no accumulation of humidity under the coat.

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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, galvanized steel. For information about other substrates, please contact our tech department.

Concrete substrate conditions (standard):

- Hardness: $R_{28} = 15\text{Mpa}$.
- Humidity: $W < 10\%$.
- Temperature: $5-35\text{ }^{\circ}\text{C}$.
- Relative humidity: $< 85\%$.

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 the necessary product.

Priming:

Apply the required primer following the guidelines above.

Mixing:

Stir the content well before thinning as some ingredients may deposit at the bottom of the pail. Use a low speed (300 rpm) mixer to thin with 10-15% water.



Water acts as a second component to the product. Hence, if thinned, the entire pail must

be used immediately.

Application:

Apply the material with roller or brush in two, at least, coats. Leave 6-24 hours between coats depending on weather conditions and speed of curing. If more time passes or if you are unsure of the interlayer adhesion, use UNIVERSAL PRIMER-2K-4060.

CONSUMPTION

First coat: $0.6-0.8\text{ kg/m}^2$.

Second coat: $0.6-0.9\text{ kg/m}^2$.

Minimum total consumption: **$1.2-1.5\text{ kg/m}^2$** .

CLEANING

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

PACKAGING

6 kg, 15 kg, 25 kg and 200 kg drums.

SHELF LIFE

HYPERDESMO[®]-F can be kept for minimum 12 months in the original unopened pails in dry places and at temperatures of $5-25\text{ }^{\circ}\text{C}$. Once a pail has been opened, use as soon as possible.

PRECAUTIONS

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.

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TECHNICAL SPECIFICATIONS

In liquid form (before application):

95% dry matter in Xylol.

PROPERTY	UNITS	METHOD	SPECIFICATION
Viscosity (BROOKFIELD)	cP	ASTM D4287, @ 25 °C	3,000-6,000
Specific weight	gr/cm ³	ASTM D1475 / DIN 53217 / ISO 2811, @ 20°C	1.4-1.5
Flash point	°C	ASTM D93, closed cup	> 65
Tack free time, @ 77 °F (25 °C) & 55% RH	hours	-	2-3
Recoat time	hours	-	6-24

The cured membrane:

PROPERTY	UNITS	METHOD	SPECIFICATION
Service temperature	°C	-	-40 to 80
Max. temperature short time (shock)	°C	-	200
Hardness	Shore A	ASTM D2240 / DIN 53505 / ISO R868	>60
Tensile strength at break @ 23 °C	Kg/cm ² (N/mm ²)	ASTM D412 / EN-ISO-527-3	>65 (>6.5)
Percent elongation @ 23 °C	%	ASTM D412 / EN-ISO-527-3	> 400
Water vapour transmission	gr/m ² .hr	ASTM E96 (Water Method)	0.8
Tensile set (after 300% elongation)	%	ASTM D412	< 3%
QUV Accelerated Weathering Test (4hr UV, @ 60 °C (UVB-Lamps) & 4hr COND @ 50 °C)	-	ASTM G53	passed (2000 hours)
Thermal resistance (100 days @ 80 °C)	-	EOTA TR011	passed

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