

## HYPERDESMO®-T

### Transparent, fully aliphatic, polyurethane liquid membrane for waterproofing & protection.

#### DESCRIPTION

**HYPERDESMO®-T** is a one component high solids, polyurethane fluid, which cures with the humidity in the atmosphere. It produces an elastic, highly durable, highly hydrophobic membrane with excellent UV resistance. Being aliphatic, it does not yellow/discolour when exposed to sunlight.

It is based on pure elastomeric, hydrophobic, aliphatic polyurethane resin, which results in excellent mechanical, chemical, thermal, UV and natural element resistance properties.

Apply with roller in one or two coats. Minimum total consumption: 0.2-1.0 kg/m<sup>2</sup> according to application type.



Although **HYPERDESMO®-T** looks coloured, especially when it is in large containers, it is stressed that the end result is, indeed, transparent.

#### RECOMMENDED FOR

Waterproofing and protection of:

- tiles,
- natural stone,
- wood,
- verandas and balconies,
- terraces.

Also suitable for sealing concrete: Applied in thick, bubble-free, coats.

#### LIMITATIONS

- Not recommended for unsound substrates.
- Non-porous substrates, such as ceramic tiles

must be primed with **PRIMER-T** first.

- Porous substrates, such as marble, natural stones must be primed with **MICROPRIMER-PU** first.

#### FEATURES & BENEFITS

- No thinning is required but SOLVENT-01 may be used.
- Excellent weather and UV resistance.
- Excellent thermal resistance, the product never turns soft. Max service temperature 80 °C, max shock temperature 200 °C.
- Resistance to cold: The film remains elastic even down to -40 °C.
- Excellent mechanical properties.
- Good chemical resistance.
- Water vapor transmission.
- Can also be applied in thick, bubble-free, coats.

#### APPLICATION PREREQUISITES

##### Can be successfully applied on:

Tiles, concrete/steel reinforced concrete or otherwise, cement roof tiles, wood, corroded metal, galvanized steel. For information about other substrates, please contact our tech department.

##### Concrete substrate conditions (standard):

- Hardness: R<sub>28</sub> = 15 MPa.
- Humidity: W < 10%.
- Temperature: 5-35 °C.
- Relative humidity: < 85%.

##### Primer selection for special conditions and substrates:

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

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### APPLICATION PROCEDURE

Clean the surface using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. If used for concrete sealing, cement laitance, loose particles, mould release agents, cured membranes must also be removed.

#### Priming:

Priming is required when application is on **non-porous** substrates, such as ceramic/glazy tiles. In this case, **PRIMER-T** is used. It is applied at a low consumption of 50-60 ml/m<sup>2</sup> with a clean cloth without leaving any pools of fluid (apply as if wiping the surface).

For **porous** substrates such as marble, coto, natural stones, fully aliphatic **MICROPRIMER-PU** should be applied at max 200 ml/m<sup>2</sup>.

#### Mixing:

Stir well, manually or with a low speed mixer. No thinning is required but SOLVENT-01 may be used.

#### Application:

**HYPERDESMO®-T** is applied as soon as **PRIMER-T** dries (after 15-20 min) with roller in one or two coats. Do not leave more than 24 hours between coats. In cases of **MICROPRIMER-PU** application, **HYPERDESMO®-T** should be

applied not earlier than 12 hours and not later than 2 days.

### CONSUMPTION

Minimum total consumption: **0.2-1.0 kg/m<sup>2</sup>** according to application type.

### CLEANING

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

### PACKAGING

1 kg, 5 kg, 20 kg and 200 kg drums.

### 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 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):

80% dry matter in Xylol.

| PROPERTY               | UNITS              | METHOD                                     | SPECIFICATION |
|------------------------|--------------------|--|---------------|
| Viscosity (Brookfield) | cP                 | ASTM D2196-86, @ 25 °C                     | 800-1,100     |
| Specific weight        | gr/cm <sup>3</sup> | ASTM D1475 / DIN 53217 / ISO 2811, @ 20 °C | 0.95-1.05     |
| Solids                 | %                  | internal                                   | 80-85         |
| Flash point            | °C                 | ASTM D93, closed cup                       | 42            |

## HYPERDESMO®-T

|  |       |   |      |
|--|-------|---|------|
| Tack free time, @ 77 °F (25 °C) & 55% RH | hours | - | 6    |
| Recoat time                              | hours | - | 6-24 |

**In cured form (after application):**

| PROPERTY   | UNITS                                      | METHOD                            | SPECIFICATION           |
|--|--|-----------------------------------|-------------------------|
| Service temperature  | °C   | -                                 | -40 to 80               |
| Max. temperature short time (shock)  | °C   | -                                 | 200                     |
| Hardness   | Shore D                                    | ASTM D2240 / DIN 53505 / ISO R868 | 40                      |
| Tensile strength at break @ 23 °C  | Kg/cm <sup>2</sup><br>(N/mm <sup>2</sup> ) | ASTM D412 / EN-ISO-527-3          | 350<br>(35)             |
| Percent elongation @ 23 °C   | %  | ASTM D412 / EN-ISO-527-3          | > 350                   |
| Water vapor transmission   | gr/m <sup>2</sup> .hr                      | ASTM E96 (Water Method)           | 0.8                     |
| QUV Accelerated Weathering Test (4hr UV, @ 60 °C (UVB-Lamps) & 4hr COND @ 50 °C) | -  | ASTM G53                          | passed<br>(3,000 hours) |
| Thermal resistance (100 days @ 80 °C)  | -  | EOTA TR011                        | passed                  |

**Chemical (hydrolysis) resistance:**

|                         |                 |            |
|-------------------------|-----------------|------------|
| Potassium Hydroxide, 8% | 10 days @ 50 °C | unaffected |
| Sodium Hypochlorite, 5% | 10 days         | unaffected |
| Water absorption        | -               | < 1.4%     |

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