

## 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.
- Concrete sealer
- Binder for marble stone carpets
- Binder for drainage systems

#### 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 and 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.

##### Standard concrete substrate conditions

- Strength: C20/25.
- Humidity:  $W \leq 5\%$ .
- Temperature: 5-35 oC.
- 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. If used for concrete sealing, cement laitance, loose particles, mould release agents, cured membranes must also be removed. Ceramic tiles must be cleaned with appropriate de-scaling product and mechanically abraded where required.

#### 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.

**Hyperdesmo T**, as a one component solvent based polyurethane product, displays variations in viscosity at different temperatures. When exposed to higher temperatures, the viscosity will decrease and at lower temperatures will increase. Pails should be kept at room temperature prior to use for material to have optimum application properties.

#### 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

0.2 lt, 1 lt, 4 lt, 10 lt, 20 lt.

#### SHELF LIFE

Can be kept for 9 months minimum in the original unopened pails in dry places and at temperatures of 5-25 °C. Once opened, use as soon as possible.

Hyperdesmo T is a one component, moisture curing polyurethane. In order to preserve original properties, pails must be stored in the above conditions. Depending on other storage conditions variations are expected in product properties in the long term.

#### 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.

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### TECHNICAL SPECIFICATIONS

#### In liquid form (before application):

PROPERTY	UNITS	METHOD	SPECIFICATION
Viscosity <sup>1</sup> (Brookfield)	cP	ASTM D4287, @ 25 °C	1000-2000
Specific weight	gr/cm <sup>3</sup>	ASTM D1475 / DIN 53217 / ISO 2811, @ 20 °C	0.95-1.05
Solids	%	internal	77-82
Tack free time, @ 77 °F (25 °C) & 55% RH	hours	internal	6
Recoat time	hours	-	6-24

<sup>1</sup> Viscosity measured on fresh product.

#### 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	(N/mm <sup>2</sup> )	ASTM D412 / EN-ISO-527-3	>25
Percent elongation @ 23 °C	%	ASTM D412 / EN-ISO-527-3	>300
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 (3,000 hours)
Thermal resistance (100 days @ 80 °C)	-	EOTA TR011	passed

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### Chemical (hydrolysis) resistance:

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

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