

## HYPERDESMO®-ADY-E

**One-component, transparent, glossy, aliphatic, elastic polyurethane liquid membrane.**

### DESCRIPTION

**HYPERDESMO®-ADY-E** is a one-component polyurethane fluid which cures with the humidity in the atmosphere to produce a transparent membrane, of increased elasticity, with uniform adhesion over the entire surface. It is aliphatic: No yellowing as a result of direct exposure to sunlight. It is ideal for colour protection of HYPERDESMO® products.

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

Apply with brush, roller or airless spraying in one or two coats. Minimum consumption per coat: 0.1 kg/m<sup>2</sup>.

### RECOMMENDED FOR

- Top-coating (pigmented) **HYPERDESMO®** and **HYPERDESMO®-LV**,
- top-coating flooring applications (pigmented),
- protecting concrete or synthetic coats.

### LIMITATIONS

Not recommended for:

- Unsound substrates,
- application in thick coats.

### FEATURES & BENEFITS

- Strong and uniform adhesion on almost any type of surface,
- highly hydrophobic,
- highly durable when exposed to the natural elements, maintains its elasticity even down to -40 °C,

- excellent heat and ultraviolet/UV resistance, it will not yellow, peel or soften up to 80 °C,
- outstanding resistance to chemicals and mechanical stresses (high tensile strength and abrasion resistance),
- compatible pigment pastes available in many colours.

### 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, etc. must be removed. In the case of smooth surfaces, they must either be graded or primed using PRIMER-T. Further primer information available on request. The application surface must be **dry**.

When used as a topcoat, for colour protection of HYPERDESMO® products, it must be pigmented with of ALCHIMICA™'s pigment pastes (10% max). It must be applied WITHIN 72 hours of HYPERDESMO®.

#### Preparation:

When stirring (or pigmenting) take care not to introduce air in the fluid, which may result in bubbling on the cured membrane. Stirring can either be done manually or with a with a low speed (300 rpm) mixer.

#### Application:

Apply with brush, roller or airless spraying in one or two coats. Do not exceed 48 hours between coats.

## HYPERDESMO®-ADY-E



If applied non-pigmented, you are advised to consider whether there are any UV resistance requirements for the substrate or surface on which it is applied. For more information, please contact our support department.

### CONSUMPTION

Subject to substrate porosity: 0.1-0.5 kg/m<sup>2</sup>.  
For concrete sealing: 0.1-0.15 kg/m<sup>2</sup>.  
For top-coating HYPERDESMO® - consumption per coat: 0.1 kg/m<sup>2</sup>.

### CLEANING

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

### PACKAGING

1 lt, 4 lt and 20 lt.

### 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):

50% dry matter in Xylol.

PROPERTY	UNITS	METHOD	SPECIFICATION
Viscosity (Brookfield)	cP	ASTM D2196-86, @ 25 °C	200-300
Specific weight	gr/cm <sup>3</sup>	ASTM D1475 / DIN 53217 / ISO 2811, @ 20 °C	1.0
Tack free time, @ 77 °F (25 °C) & 55% RH	hours	-	6-8
Recoat time	hours	-	24

#### The cured membrane:

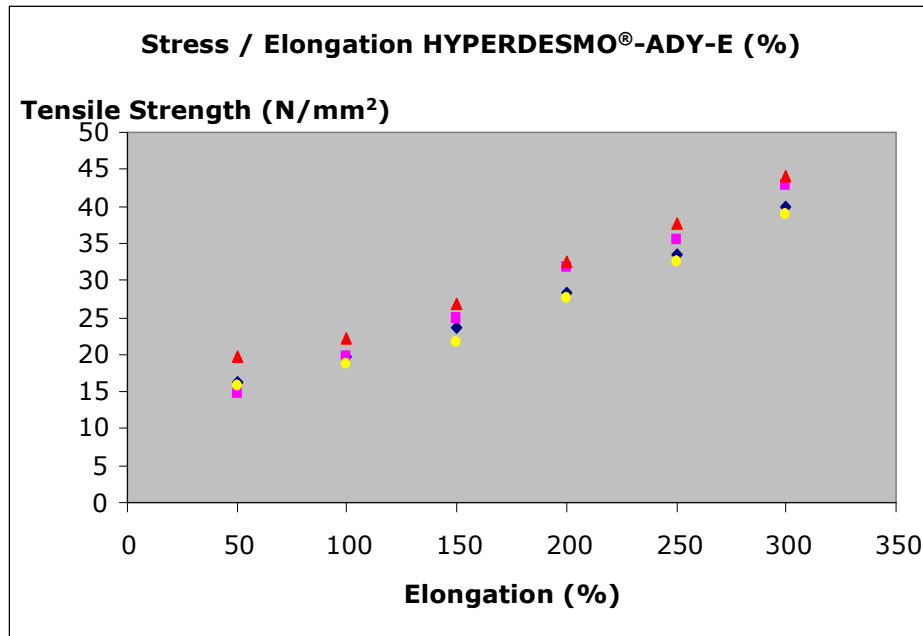
PROPERTY	UNITS	METHOD	SPECIFICATION
Service temperature	°C	-	-40 to 80
Max. temperature short time (shock)	°C	-	200
Hardness	Shore D	ASTM D2240 / DIN 53505 / ISO R868	40

## HYPERDESMO<sup>®</sup>-ADY-E

Tensile strength at break @ 23 °C	Kg/cm <sup>2</sup> (N/mm <sup>2</sup> )	ASTM D412 / EN-ISO-527-3	40
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
Thermal resistance (100 days @ 80 °C)	-	EOTA TR011	passed
QUV Accelerated Weathering Test (4hr UV, @ 60 °C (UVB-Lamps) & 4hr COND @ 50 °C)	-	ASTM G53	passed (2000 hours)
Hydrolysis (Potassium Hydroxide 8%, 10 days @ 50 °C)	-	-	no significant elastomeric property change
Hydrolysis (Sodium Hypochlorite 5%, 10 days)	-	-	no significant elastomeric property change
Water absorption	-	-	< 1.4%

## HYPERDESMO®-ADY-E

### ELONGATION CHART: CHEMICAL & HYDROLYTIC RESISTANCE



- HYPERDESMO®-ADY-E, fully cured
- Hydrolysis (HCl, PH=2, 2 weeks, RT)
- Hydrolysis (KOH, 8%, 15 days @ 50°C)
- QUV (1000 hrs).

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