

# HYPERDESMO<sup>®</sup>-ADY-100

## One-Component, Solvent-less, Transparent, Matte, Aliphatic Polyurethane Liquid Membrane.

### DESCRIPTION

**HYPERDESMO<sup>®</sup>-ADY-100** produces a matte finish and is free of solvents, therefore, better suited for application in closed spaces. It is a one-component polyurethane fluid which cures with the humidity in the atmosphere to produce a transparent membrane with uniform adhesion over the entire surface. It is aliphatic: No yellowing as a result of direct exposure to sunlight.

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

Apply with roller. Maximum consumption:  
50 gr/m<sup>2</sup> per coat.

### RECOMMENDED FOR

- Effective protection, against abrasion and other mechanical stresses, of flooring applications HYPERFLOOR-2K, HYPERDESMO<sup>®</sup>-D-2K and epoxy systems. Pigmentation of HYPERDESMO<sup>®</sup>-ADY-100 can also protect the above from discoloration when exposed to sunlight.
- Providing a matte finish to other flooring top-coats, e.g. HYPERDESMO<sup>®</sup>-T, HYPERDESMO<sup>®</sup>-ADY and HYPERDESMO<sup>®</sup>-ADY-E.
- Waterproofing and protection of verandas and balconies where a matte finish is required.

### LIMITATIONS

Not recommended for:

- Unsound substrates,
- Application in thick coats. Consumption must

not exceed 50 gr/m<sup>2</sup> per coat.

### FEATURES & BENEFITS

- solvent-less, 100% solids,
- matte finish,
- strong, uniform and fast adhesion on almost any type of surface,
- highly hydrophobic,
- highly durable when exposed to the natural elements, maintains its elasticity 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

When used for colour protection of HYPERFLOOR-2K, HYPERDESMO<sup>®</sup>-D-2K or epoxy systems, it must first be pigmented (10% max) with the desired colour from ALCHIMICA's range of pastes. Application must take place within 24 hours of application of the top-coated membrane. To give a matte finish to other glossy top-coats, e.g. HYPERDESMO<sup>®</sup>-T, HYPERDESMO<sup>®</sup>-ADY and HYPERDESMO<sup>®</sup>-ADY-E, application must take place within 24 hours, otherwise, please contact ALCHIMICA Technical Assistance department.

#### Mixing:

When mixing (thinning or pigmentation) avoid fast or excessive stirring as it may introduce air in the mix, which, in turn, may result in bubbling on the cured membrane. Mixing can either be done manually or with a with a low speed (300 rpm)

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mixer. Thin, if necessary, with SOLVENT-01 only.

## Application:

Apply with roller. Do not leave more than 24 hours between coats.



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

Maximum consumption per coat: **50 gr/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 kg, 5 kg and 20 kg.

## 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

HYPERDESMO<sup>®</sup>-ADY-100 is free of solvents. Nevertheless, you are advised to observe the standard safety rules: Apply in well-ventilated, no smoking areas, away from naked flames. In closed spaces use ventilators and carbon active masks. The M.S.D.S. (Material Safety Data Sheet) is available on request.

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## TECHNICAL SPECIFICATIONS

### In liquid form (before application):

PROPERTY	UNITS	METHOD	SPECIFICATION
Viscosity (Brookfield)	cP	ASTM D2196-86, @ 25 °C	150-350
Specific weight	gr/cm <sup>3</sup>	ASTM D1475 / DIN 53217 / ISO 2811, @ 20 °C	1.10-1.20
Tack free time, @ 77 °F (25 °C) & 55% RH	hours	-	3-4
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 D	ASTM D2240 / DIN 53505 / ISO R868	> 60
Tensile strength at break @ 23 °C	Kg/cm <sup>2</sup> (N/mm <sup>2</sup> )	ASTM D412 / DIN 52455	550 (55)
Percent elongation @ 23 °C	%	ASTM D412 / DIN 52455	> 50
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	-	-	< 1.0%

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