

## HYPERDESMO®-300

**Heavy duty, single-component, highly chemical resistant polyurethane/polyurea liquid membrane for demanding waterproofing applications.**

### DESCRIPTION

**HYPERDESMO®-300** is a single component, moisture curing polyurethane/polyurea liquid applied membrane, with excellent chemical resistance and mechanical properties, very high abrasion resistance, specially designed for difficult and demanding waterproofing applications.

**HYPERDESMO®-300** displays crack bridging properties over a wide range of extremely high or low temperatures. The product has thixotropic rheology that allows easy application on sloped and vertical substrates without any sagging. The material contains very low amount of solvent. It is non-flammable and classified as "non-IMO" or ADR during transportation.

Apply using brush, roller or airless spraying. Consumption: 1.5-2.5 kg/m<sup>2</sup>, depending on application type.

**HYPERDESMO®-300** is the only single component polyurethane/ polyurea, liquid/cold applied membrane that has been certified upon launch for bridge deck waterproofing according to ETAG 033 and now according to EAD 030675-00-0107.

**HYPERDESMO®-300** is also ideal for waterproofing swimming pools (under tiles), chemical-treatment tanks and roofs with high traffic.

### COMPLIANCE - CERTIFICATION

EAD 030675-00-0107 "LIQUID APPLIED BRIDGE DECK WATERPROOFING KITS"

Report No. 16/0675 Issued by IETcc ETA

### FEATURES & BENEFITS

- Excellent crack bridging.

- Low solvent, non-flammable.
- Excellent chemical resistance. Can withstand petrochemicals, chlorine and salts that commonly attack bridge decks, or might be present in swimming pools and water tanks.
- Thixotropic, can be applied on any complex structure, assuring complete seamless and homogenous covering of uneven concrete surfaces usually encountered on bridge decks or vertical surfaces met on swimming pools and tanks.
- Excellent mechanical properties, high elasticity, tensile and tear strength. Can withstand the stresses of heavy asphalt application machinery.
- Excellent thermal resistance, the product never turns soft. Service temperature >80 °C, max shock temperature 220 °C.
- Resistance in the cold: The film remains elastic even down to -40 °C.
- Exceptional compatibility with asphalt overlays without needing an adhesion layer.
- Highly hydrophobic.
- Compatible with standard Primers and Topcoats of **ALCHIMICA™**.
- ALCHIMICA's primers AQUADUR & AQUASmart®- DUR are recommended to be used depending on substrate porosity, environmental conditions and project parameters.

### APPLICATION PROCEDURE

#### Standard concrete substrate conditions

- Strength: C20/25.
- Humidity: W ≤ 5%.
- Temperature: 5-35 °C.
- Relative humidity: < 85%.

## HYPERDESMO®-300

### Mixing:

Use a low speed (300 rpm) mixer. Add SOLVENT-01 10% for application by spraying.

### Application:

Available in roller-grade and spray-grade. Apply by brush, roller or airless spraying machine.

### CONSUMPTION

Consumption: 1.5-2.5 kg/m<sup>2</sup>

For Bridge Deck waterproofing: +/-2.5 kg/m<sup>2</sup>

For other types of application, contact our Technical Assistance Department.

### CLEANING

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

### PACKAGING

25 kg drums.


### SHELF LIFE

Can be kept for minimum 12 months in the original unopened pails in dry places and at temperatures of 5-25 °C. Once a pail has been 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.

### CLASSIFICATION ACCORDING TO EOTA GUIDELINE (EUROPEAN ORGANISATION OF TECHNICAL APPROVAL)

			
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CPR-16/0675-COAT			
EAD 030675-00-0107			
1219			
HYPERDESMO-300			
Liquid Applied Roof Bridge Deck Waterproofing Kit			
www.alchimica.com			

## HYPERDESMO®-300

Essential characteristics	Performance	Requirement	Method	Harmonized technical specification
Bond strength	2.8 Mpa	$\geq 1$ Mpa	EN 13596	EAD 030675-00-0107
Bond strength after heat impact	3.0 Mpa	$\geq 1$ Mpa	EN 13596	EAD 030675-00-0107
Resistance to chloride ion penetration	0.007 %	$\leq 0.04$ %	TR 22	EAD 030675-00-0107
Resistance to compaction (160°C)	pass	watertight	EN 14692	EAD 030675-00-0107
Resistance to perforation	Pass I4	watertight	TR 006	EAD 030675-00-0107
Water tightness	Pass	watertight	EN 14694	EAD 030675-00-0107

### TECHNICAL SPECIFICATIONS

PROPERTY	UNITS	METHOD	SPECIFICATION
Viscosity (BROOKFIELD)	cP	ASTM D4287, @ 25 °C	2,000-5,000
Density @ 20 °C	gr/cm <sup>3</sup>	ASTM D1475 / DIN 53217 / ISO 2811	1.40-1.50
Service temperature	°C	-	-40 to >80
Max. temperature short time (shock)	°C	-	220
Abrasion Resistance (TABER)	mg loss (CS17/1000/1000)	ASTM D4060-14	30
Hardness	Shore A	ASTM D2240	80
Tensile strength	Kg/cm <sup>2</sup> (N/mm <sup>2</sup> )	ASTM D412	>70 (>7)
Percent elongation	%	ASTM D412	> 250
Thermal resistance (100 days @ 80 °C)	-	EOTA TR011	passed

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