

# HYPERDESMO®- COLD CURE POLYUREA 2K ZERO



ETA – 18/0946

## Zero VOC Cold Cure Polyurea, for waterproofing & protection

### DESCRIPTION

**HYPERDESMO®-COLD CURE POLYUREA ZERO** is a two-component, squeegee-applied polyurea based liquid membrane. The material cures rapidly and forms a bubble free membrane in less than 2 hours. It produces a highly durable waterproofing membrane with strong adhesion to many types of surfaces.

Apply with brush, roller, squeegee or airless spray in one or two coats with minimum total consumption of 1.5-2 kg/m<sup>2</sup>.

### COMPLIANCE - CERTIFICATION

- CE: ETA-18/0946

### RECOMMENDED FOR

Waterproofing and protection of:

- polyurethane insulation foams,
- bathrooms,
- verandas and balconies,
- roofs, also roofs of high fire risk plants, e.g. power, chemicals, etc.,
- light roofing made of metal or fibrous cement,
- asphalt membranes.

### LIMITATIONS

- Not recommended for unsound substrates.



**For exposed use, a protective topcoat must be used when dark colours are required.**

**Upon mixing the two components, immediately pour material on substrate and apply by rubber squeegee. The mixed product increases in viscosity very quickly**

**and application happens within 10-15 minutes.**

**Pot life extends if pails stored at lower temperatures (20-25 degrees C). If pails are left in heat prior to use, the pot life will be reduced further.**

### FEATURES & BENEFITS

- Fast curing.
- Bubble and defect-free result.
- Low temperature application.
- Excellent adhesion to almost any type of surface, with or without the use of special primers.
- Resistance to cold: The film remains elastic even down to -40 °C.
- Excellent mechanical properties, high tensile and tear strength, high abrasion resistance.
- Water vapor transmission: The film breathes so there is no accumulation of humidity under the coat.

### APPLICATION PREREQUISITES

#### Can be successfully applied on:

Concrete/steel reinforced concrete or otherwise, fibrous cement, mosaic, cement roof tiles, old (but well adhered) acrylic and asphalt coats, wood, corroded metal, galvanized steel. For information about other substrates, please contact our tech department.

#### Standard concrete substrate conditions

- Strength: C20/25.
- Humidity: W ≤ 5%.
- Temperature: 5-35 °C.
- 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 substrate using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes must also be removed. Surface irregularities should also be filled.

#### Priming:

Apply the required primer following the guidelines above.

#### Mixing:

Use a low speed (300 rpm) mixer for the two components.

Attention: Pot life of mix, 10-15 minutes.

#### Application:

Apply with rubber squeegee in one or two coats. Do not exceed 48 hours between coats.

### CONSUMPTION

First coat: 0,8-1 kg/m<sup>2</sup>.

Second coat: 0.8-1 kg/m<sup>2</sup>.

Minimum total consumption: **1.5-2 kg/m<sup>2</sup>**.

### CLEANING

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

### PACKAGING

Component A: 5 Kg

Component B: 0,450 Kg

Larger sets are available to experienced users.

### 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® COLD-CURE POLYUREA ZERO

is free of solvents. Nevertheless, you are advised to observe the standard safety rules. The MSDS (Material Safety Data Sheet) is available on request.

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

REQUIREMENTS	HYPERDESMO COLD CURE POLYUREA-2K	HYPERDESMO COLD CURE POLYUREA-2K + HYPERDESMO-ADY
External fire performance		Broof (t1)
Fire reaction		Euroclass E
Expected working life	W3 (25 years)	W2 (10 years)
Climatic zone of use		S (Severe)
User loads	P1	P3
Roof slopes		S1 to S4
Minimum surface temperatures		TL3 (-20°C)
Maximum surface temperatures		TH4 (90°C)

## TECHNICAL SPECIFICATIONS

### In liquid form (before application):

PROPERTY	UNITS	METHOD	SPECIFICATION
Viscosity A+B (initial)	cP	ASTM D2196-86, @ 25 °C	2500-4000
Specific weight	gr/cm <sup>3</sup>	ASTM D1475 / DIN 53217 / ISO 2811, @ 20 °C	1,4
Tack free time, @ 77 °F (25 °C) & 55% RH	hours	-	1-1.5
Recoat time	hours	-	3-24
Pot life of mix	min	-	5-7

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

PROPERTY	UNITS	METHOD	SPECIFICATION
Service temperature	°C	-	-40 to 80
Max. temperature short time (shock)	°C	-	200
Hardness	Shore A	ASTM D2240 / DIN 53505 / ISO R868	85
Tensile strength at break @ 23 °C	(N/mm <sup>2</sup> )	ASTM D412 / EN-ISO-527-3	> 12
Elongation @ 23 °C	%	ASTM D412 / EN-ISO-527-3	> 400
Water vapor transmission	gr/m <sup>2</sup> .hr	ASTM E96 (Water Method)	0.8
Adhesion to concrete	kg/cm <sup>2</sup> (N/mm <sup>2</sup> )	ASTM D4541	> 30 (> 3)
QUV Accelerated Weathering Test (4hr UV, @ 60 °C (UVB-Lamps) & 4hr COND @ 50 °C)	-	ASTM G53	passed (2000 hours)
Hydrolysis (8% KOH, 15 days @ 50°C)	-	-	no significant elastomeric property change
Hydrolysis (H <sub>2</sub> O, 30 day-cycle 60-100 °C)	-	-	no significant elastomeric property change
HCL (PH=2, 10 days @ RT)	-	-	no significant elastomeric property change

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