

## HYPERDESMO®-S

## Product Data Sheet

### New Generation, Low Solvent, Thixotropic, Polyurethane Liquid Membrane For Waterproofing And Protection.

#### Description

**HYPERDESMO®-S** is a result of **ALCHIMICA's** investment in new production facilities and polymerization procedures. This investment facilitated the manufacture of a low solvent **HYPERDESMO®** i.e a non-flammable material without hazardous transportation limitations (non-IMO). Furthermore, with **HYPERDESMO®-S** the waterproofing of complex structures and vertical substrates is now easily done even in one coat as the product's rheology allows easy application of this kind. In addition, the product displays minimum bubble formation even in high consumptions.

The use of all **HYPERDESMO®** range additives is possible: Accelerator 3000A, SOLVENT-01 and ALCHIMICA's pigment pastes.

Full range of primers used in classic **HYPERDESMO®** system applies to **HYPERDESMO®-S** as well.

#### Recommended For

Waterproofing of:

- Protected complex structures,
- Flat roofs for non UV-exposed applications, (eg. inverted thermal insulation roofs),
- As part of the **HYPERDESMO®** system (under **HYPERDESMO® CLASSIC** or/and **HYPERDESMO® ADY-E** final layer),
- Walls (under tiles, ventilated facades),
- Wet rooms, verandas and balconies (under tiles).

#### Compliance

The product is **CE certified**: 2085-CPR-061 according to the European Standard EN 1504-2.

#### Features & Benefits

- Highly Elastic.
- Easy application even on vertical substrates.
- Resistance to cold: The film remains elastic even down to -40°C.
- Low solvent, non-Flammable.
- Non-toxic after full cure.
- Water vapor transmission: The film breathes so there is no accumulation of humidity under the coat.
- Special primers available for almost any substrate.

#### Limitations

**Not recommended for :**

- Unsound substrates (in some cases, application is possible with the use of geotextile reinforcement; for more details you may contact our technical service department).
- Waterproofing of swimming pool surfaces in contact with chemically treated water.
- Applications where high temperatures are involved. Not recommended for waterproofing under dark color tiles (outdoors) or on thermo-insulating materials.
- It should not stay under UV-exposure. Should be covered (after full cure) with the specified non-exposed system build up.
- For exposed waterproofing applications, the use of a protective topcoat of **HYPERDESMO CLASSIC** or/and **HYPERDESMO® ADY-E** (always pigmented in the right colour) is mandatory.

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### 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 technical service department.
- ✓ **Standard concrete substrate conditions (no primer needed):**
  - Hardness:  $R_{28} = 15 \text{ MPa}$
  - Humidity:  $W < 10\%$
  - Temperature:  $5-35^\circ\text{C}$
  - Relative humidity:  $< 85\%$
- ✓ **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 with **HYPERSEAL®-25LM-S** or **HYPERSEAL®-EXPERT**.

- ✓ **Priming:** Apply the required primer following the guidelines above.
- ✓ **Mixing:** Use a low speed (300 rpm) mixer. Add SOLVENT-01 at 5-10% for application by spraying.
- ✓ **Application:** Apply with roller, brush or airless spraying (200-250 bar) in one or two coats. Do not exceed 48 hours between coats.

### Shelf Life

Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of  $5-25^\circ\text{C}$ . Once a pail has been opened, use as soon as possible.

### Cleaning

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

### Packaging

- 6 kg, 25 kg pails.
- Color : Grey

### Consumption

Minimum total consumption: **1.5-2 kg/m<sup>2</sup>** in one or two coats

### Safety Information

Please refer to the Material Safety Data Sheet as issued at the time of purchase.

### Technical Specifications

In Liquid Form (Before application):

Property	Units	Method	Specification
Viscosity (Brookfield)	cP	ASTM D2196-86, @ $25^\circ\text{C}$	3,000-6,000
Specific weight	gr/cm <sup>3</sup>	ASTM D1475 / DIN 53217 / ISO 2811, @ $20^\circ\text{C}$	1.5-1.6

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In Cured Form (After application):

Property	Units	Method	Specification
Service temperature	°C	-	-40 to 60
Hardness	Shore A	ASTM D2240/DIN 53505 / ISO R868	60
Tensile strength at break @ 23°C	N/mm <sup>2</sup>	ASTM D412 / EN-ISO-527-3	3.0
Elongation @ 23°C	%	ASTM D412 / EN-ISO-527-3	>800
Water vapor transmission	gr/m <sup>2</sup> .hr	ASTM E96 (Water Method)	0.8
Water Absorption (7 days RT)	%	Internal Method	1


**DOP: 2085-CPR-061/07.12.2018**
**EN 1504-2**
**Surface Protection Products – Coating**

Permeability to CO <sub>2</sub>	SD>50 m
Permeability to water vapor	SD<5 m Class I (permeable)
Capillary absorption & permeability to water	W<0.1 kg/m <sup>2</sup> .h0.5
Adhesion strength by pull-off test	≥1.5 (1.0) N/mm <sup>2</sup>
Adhesion strength after thermal compatibility	≥1.5 (1.0) N/mm <sup>2</sup>
Reaction to fire	Euroclass F
Dangerous substances	In accordance with 5.3
Artificial weathering according to EN 1062-11, for outside application	No change
-blistering	
-cracking	
-flaking	
-colour change	

For more information on Hyperdesmo, Aquasmart &amp; Hyperseal range of products and application methods

 Please contact Alchimica Technical Service at [info@alchimica.co.in](mailto:info@alchimica.co.in)

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