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HYPERDESMO®-2K-W

Two-Component, Solvent-free, Polyurethane Coating for Flashing and Tank Waterproofing & Protection.

DESCRIPTION

HYPERDESMO®-2K-W is a two-component, solvent-free, thixotropic coating, based on high quality elastomeric polyurethane resins. After polymerization, it produces a strong, elastic, hydrophobic membrane suitable for waterproofing and protection. It is recommended for waterproofing of water tanks. It has been certified for use in potable water tanks (more details available on request from our technical department).

Apply with roller in two coats with consumption per coat of 0.7 kg/m^2 . On the tank floor, a single coat of 1.4 kg/m^2 is sufficient.

On tank surfaces with direct exposure to sunlight, **HYPERDESMO®-2K-W** will discolor. This is purely visual; it does not affect the performance of the product.

COMPLIANCE - CERTIFICATION

It has been certified by the O.T.E.C. Institute (Barcelona, Spain) for waterproofing of drinking water tanks, in accordance to the EU guideline 98/83/EC.

CE certified acc. EN 1504-02

No: 2928-CPR-55 (HYPERDESMO 2KW).

See table below.

RECOMMENDED FOR

Waterproofing and protection of:

- Water tanks made of concrete/steel reinforced concrete or otherwise, steel or other material,
- · prefabricated concrete tanks,
- drinking water tanks,
- tanks with wall movement due to expansion and contraction.

FEATURES & BENEFITS

- Excellent adhesion on almost any type of surface.
- Being solvent-less, it can easily be applied in closed spaces.
- Extremely hydrophobic and hydrolysis resistant.
- Wide working temperature range: -40 °C to 90
- Good chemical resistance.
- Certified for potable water tanks, in accordance with the latest European Union requirements.
- The best value, performance-to-cost, solution for water tanks.
- Special primers, topcoats and coloring pastes are available.

APPLICATION PROCEDURE

Standard concrete substrate conditions

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

(The following guidelines are for **concrete tanks**. For information about tanks made of other materials, please contact our support department.)

Clean the surface using jet water, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes must be removed. Fill surface irregularities with HYPERSEAL®-25LM-S or HYPERSEAL®-EXPERT.



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Priming:

Apply **AQUADUR**, **AQUASMART**®-**DUR** primer particularly in case of negative pressure (e.g. in underground tanks). As soon as the primer has cured, seal cracks, holes and the edges of the tank walls and floor with **HYPERSEAL**®-**25LM-S** or **HYPERSEAL**®-**EXPERT**, the polyurethane mastic.

Mixing:

Mix the two components using a low speed (300 rpm) mixer.

Application:

Apply with roller in two coats with consumption per coat of 0.7 kg/m^2 . On the tank floor, a single coat of 1.4 kg/m^2 is sufficient. Information on application by airless spraying is available on request from our technical department.

POT LIFE

Pot life once the two components have been mixed is 30 min in 20 °C. It can be increased by:

- 1. Keeping the mix in a cooler place, away from the sun,
- 2. Pouring the mix on the floor, in order for it to cool down, and then spreading it,
- 3. Pouring the mix in a separate wide and shallow container.

CONSUMPTION

Consumption per coat: 0.7 kg/m². Minimum total consumption: **1.4 kg/m²**.

CLEANING

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

PACKAGING

9 kg (comp. A 1.5 kg, comp. B 7.5 kg) and 24 kg (comp. A 4 kg, comp. B 20 kg).

COLOUR

• RAL 9001 (off-white).

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

Although it does not contain volatile substances, it is highly recommended that closed spaces be well ventilated to recycle the air in which people will work. The possibility of methane gas coming from the ground and being trapped in the tank should also be considered. The MSDS (Material Safety Data Sheet) is available on request.



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TECHNICAL SPECIFICATIONS

In liquid form (before application):

| PROPERTY | UNITS / METHOD | COMPONENT A (HARDENER) | COMPONENT B (RESIN) |
|------------------------|--|---------------------------|------------------------|
| | PIETHOD | (HARDENER) | (RESIN) |
| Form | - | liquid | thixotropic paste |
| Viscosity (Brookfield) | cP / | 15,000-20,000 | |
| of the mixture | ASTM D2196-86, @ 25 °C | | |
| Consider watch | gr/cm ³ / | 1 20 1 25 | 1 40 1 50 |
| Specific weight | ASTM D1475 / DIN 53217 / ISO 2811, @ 20 ℃ | 1.20-1.25 | 1.40-1.50 |
| Solid residue | % | 100 | 100 |
| Mixing ratio | by weight | 1 part | 5 parts |
| Recoat time | hours | 6-48 | |
| Pot life @ 25 °C | min | 20-30 | |

In cured form (after application):

| PROPERTY | UNITS | METHOD | SPECIFICATION |
|----------------------|--|-----------------------------------|---------------|
| Service temperature | °C | - | -40 to 90 |
| Hardness | Shore D | ASTM D2240 / DIN 53505 / ISO R868 | > 40 |
| Elongation at break | % | ASTM D412 | > 100 |
| Tensile strength | Kg/cm ² (N/mm ²) | ASTM D412 | 200 (20) |
| Water absorption | % | DIN 53495 | < 0.5 |
| Adhesion to concrete | Kg/cm ² (N/mm ²) | ASTM D4541 | 20 (2) |



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| CE |
|---|
| 20 |
| ALCHIMICA S.A. |
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| 2928-CPR-55 |
| EN 1504-2:2004 |
| 2928 |
| HYPERDESMO 2KW |
| Concrete surface protection systems - Coating |
| www.alchimica.com |

| Essential characteristics | Performance | Harmonized technical specification |
|---|------------------------------|------------------------------------|
| CO ₂ permeability, m | S _D >50 | |
| Permeability to water vapor, m | S _D <5 Class I | |
| Capillary absorption, kg/m ² ·h ^{0.5} | w<0.1 | |
| Adhesion strength by pull-off test, N/mm ² | ≥1.5 | |
| Abrasion resistance, mg | <3000 | EN 1504-2:2004 |
| Impact resistance, N.m | ≥4 Class I | |
| Reaction to fire | Euroclass F | |

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