

HYPERDESMO[®]-2K-TECH FC

Two-component, fast- set, spray applied, fire retardant polyurethane/polyurea coating for waterproofing & protection.

DESCRIPTION

HYPERDESMO[®]-2K-TECH FC is a two-component, 1:1 by volume, zero VOC, ultra- low viscosity polyurethane/polyurea coating for waterproofing and protection.

It is highly elastic, class I fire retardant system that has a polymerization profile specially formulated for enhanced adhesion. It is highly recommended for commercial and industrial applications that require high levels of abrasion resistance and impact strength.

Minimum total consumption: 1.5-2.0 kg/m².

RECOMMENDED FOR

Sealing of cementitious surfaces.

Waterproofing and protection of:

- PU and polystyrene insulation foam,
- floors,
- roofs,
- pipes.

Product recommended as an in-mold coating and for applications such as artificial tree bark and flexible brick panels.

LIMITATIONS

Not recommended for:

- unsound substrates.



Direct UV exposure requires the use of a top coat to retain the colour. Recommended Top coats:

HYPERDESMO ADY 810

HYPERDESMO ADY-2K

AQUASMART TC ELASTIC

AQUASMART TC FLOOR PROTECT

The selection of the final topcoat should be done based on the final use of the surface. Please see individual TDS of the above list or contact our technical department.

FEATURES & BENEFITS

- Very low viscosity of both components. Can be applied by low-pressure plural dispensing equipment at lower temperatures/room temperature.
- Quick curing - gel time 30 sec (unaffected by humidity and weather).
- Class I Fire Retardant coating
- Bubble and defect free membrane.
- Excellent Formability
- 100% solids,
- Excellent thermal resistance, the product never turns soft. Max service temperature 80 °C, max shock temperature 250°C.
- Resistance in the cold: The film remains elastic even down to -40 °C.
- Excellent mechanical properties: High tensile and tear strength, high abrasion resistance.
- Good chemical resistance.
- Moisture vapor transmission: The film breathes so there is no accumulation of humidity under the coat.
- Large range of primers available for most substrates and varying climatic/substrate conditions.
- Range of Aliphatic top coats for UV protection.

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APPLICATION PREREQUISITES

Concrete substrate conditions (standard):

- Hardness: $R_{28} = 15\text{Mpa}$.
- Humidity: $W < 10\%$.
- Temperature: $5\text{-}35\text{ }^{\circ}\text{C}$.
- Relative humidity: $< 85\%$.

Primer selection for special conditions and substrates:

Please refer to the **Primer Selection Table**.

APPLICATION PROCEDURE

Clean the surface using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes must be removed. Fill surface irregularities with the appropriate products.

Priming:

Apply the required primer following the guidelines above.

Application:

Drums of components should be heated to a minimum temperature of 25°C prior to mixing or dispensing. Please contact our technical department for information on setting up plural

component dispensing machines. Do not walk on membrane for 24 hours after application.

CONSUMPTION

Minimum total consumption: **1.5-2.0 kg/m²**.

CLEANING

Cured material is very difficult to remove. Spillages should be kept to a minimum and cleaned up immediately. A special solvent is available for cleaning and flushing of the lines.

PACKAGING

2x200 Kg Drums
2x20 Kg Steel Pails

SHELF LIFE

Can be kept for minimum 12 months in the original unopened pails in dry places and at temperatures of $5\text{-}25\text{ }^{\circ}\text{C}$.

SAFETY INFORMATION

The MSDS (Material Safety Data Sheet) is available on request.

TECHNICAL SPECIFICATIONS

In liquid form (before application):

| PROPERTY | UNITS | METHOD | SPECIFICATION | |
|------------------------|--------------------|---|-----------------------------|---------|
| | | | COMP. A | COMP. B |
| Viscosity (BROOKFIELD) | cP | ASTM D2196-86, @ $25\text{ }^{\circ}\text{C}$ | 150-200 | 150-200 |
| Specific weight | gr/cm ³ | ASTM D1475 / DIN 53217 / ISO 2811, @ 20°C | 1.19 | 1.18 |
| | | | Cured membrane: ~ 1.00 | |
| Gel time | sec | - | 30 | |

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The cured membrane:

| PROPERTY | UNITS | METHOD | SPECIFICATION |
|---|----------------------|-----------------------------------|---------------|
| Service temperature | °C | - | -30 to 80 |
| Max. temperature short time (shock) | °C | - | 250 |
| Hardness | Shore A Shore D | ASTM D2240 / DIN 53505 / ISO R868 | 90 40 |
| Abrasion Resistance (mg loss, CSi7 wheels, 1000gr, 1000 cycles) | mg | ASTM D6040 | 40 |
| Tensile strength at break @ 23 °C | (N/mm ²) | ASTM D412 / EN-ISO-527-3 | >20 |
| Percent elongation @ 23 °C | % | ASTM D412 / EN-ISO-527-3 | > 300 |
| Tear resistance | KN/m | ASTM D412 | >80 |

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