



SOUPLETHANE 6

Two-component, solvent-free, polyurea-urethane resin providing a continuous and with no microporosities liquid membrane for waterproofing, anti-corrosion protection or floor coating, applicable manually (brush, roller) or by spraying with airless spraying equipment.

Application Fields

SOUPLETHANE 6 can be used on every substrate : concrete, wood, metal, PS, asphalt, bituminous membrane, PVC

| BUILDING | | CIVIL ENGINEERING INDUSTRY - MARITIME | |
|---------------------------------|---------------------|--|-------------------------------------|
| Accessible or not terraces | Technical locals | Works of engineering | Pools, Fountains |
| Parking terraces | Intermediate floors | Bridges (concrete, wood, metal) | Swimming pools |
| Balconies, corridors | Elevator pits | Viaducts | Beaches of pools |
| Metallic roofs, Gutters | Foundations | Tunnels (extrados) | Buffers |
| On thermal insulation, PSE / PU | Bleachers | Pharmaceutical industry flooring | Ozonation tanks |
| | | | Agro-alimentary industrial flooring |

Characteristics

| | | | |
|--------------------------------|---|--------------------------------|--|
| Chemical Nature | 2-Component Polyurea-urethane resin (aromatic) | Mixing ratio | Comp. A / Comp. B = 3 / 1 in volume |
| Composition | Component A - polyol : Colored opaque liquid Component B – isocyanate : Transparent amber liquid | Density (at 20°C) | Mixture A+B : 1.3 g / ml (DIN 53217 / EN ISO 2811) |
| Solvent-free | 100 % solid content (ISO 1515) | Fire resistance | Bfl-S1 |
| Flash point Component A | 248 °C | Flash point Component B | 212 °C |
| Colors | Crème-Cream (Ivory, prox. Ral1015), gris-grey (prox. Ral 7040), green, red – Others upon request | | |

Advantages

| | |
|---|-------------------------|
| Excellent adhesion: 4 MPa on concrete | Solvent-free, Odor-free |
| Resistance to cracking concrete : 5 mm | Bisphenol A-free |
| Resistance to thermal shocks and hydrolysis : 90 ° C | Fast start-up time |
| Compression strength : > 110 MPa | Easy application |
| Excellent chemical resistance / no bacteria development | No chalking |

Properties

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|---|--|---|---|
| Concrete adhesion | 4 MPa (concrete failure) (NF EN 1542) | Shrinkage | 0 |
| Steel adhesion | 9 MPa (NF EN 1542) | Tensile strength | 20 MPa (NF EN ISO 527-3) |
| Service temperature (air) | - 50°C to + 160°C | Elongation | 60 % (NF EN ISO 527-3) |
| Fire resistance | Bfl-S1 (NF EN 13501-1 + A1 :2013) | Shore A Hardness | 95 (ISO 868) |
| Chemical resistance | 1 < pH < 13 | Compression strength | 113 MPa |
| Resistance to Radon gaz / compared to PVC | Attenuation Coeff. C1/C2 159 000 / 9 | Chloride permeability | <10 coulombs (ASTM C 1202) |
| Resistance to back pressure | 1 MPa | Service temperature (in immersion in water) | 80°C |
| Chemical attack due to concrete | No effect | Water permeability | No penetration (DIN 1048) |
| Thermal shock resistance | - 50 °C to + 160°C | Salt spray resistance | 2 000 hours (ASTM B117 / D1654) |

| Packaging | in kits |
|-----------------|--|
| 5 kg | Pre-dosed Kit |
| 35 kg | (20 L component A + 7 L component B) |
| 104 kg | (3 x 20 L component A + 1 x 20 L component B) |
| 1 040 kg | (3 x 200 L component A + 1 x 200 L component B) |

Storage

From the date of manufacture and in original unopened packaging, under cover at more than 5 °C in a cool, ventilated place (frost free)
Shelf life : 12 months



Implementation

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|-----------------------------------|---|---|--|
| Preparation of the mixture | <input type="checkbox"/> Thoroughly homogenize the polyol (A) before mixing. | | |
| Application | Check the humidity of the substrate, the relative humidity, the ambient temperature of the products and the substrates, and the dew point beforehand. If the humidity of the substrate is > 4%, the KEMIPOX or PU AQUEUX system can be used to form a barrier against ascending humidity. | | |
| Substrate temperature | -20°C min. / +70°C max. | Dew point : The substrate must be at + 3 ° C above the dew point to reduce the risk of condensation. | |
| Relative Humidity (RH) | < 95 %. | | |

Spraying through high-pressure 2-component airless pump

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|--|-----------|-------------------------|---|--|
| Thickness | 1 to 3 mm | Viscosity (20°C) | Comp. A : 3 800 cps / Comp. B : 150 cps | |
| | | Temperature | Component A : 35°C / Component B : 20°C | |
| <i>application possible in one continuous layer of 5 mm if necessary</i> | | Pressure | 180 / 200 bars | |
| Covering time | | immediately | | |
| Start-up time | | 12h | | |

| | | | | |
|--|--|----------|-------------|---------|
| Pot life | Temperature | | + 20°C | |
| | Pot Life | | ~ 2 minutes | |
| | The pot life decreases as the temperature and / or amount of prepared product increases. | | | |
| Covering time | Before application of SOUPLETHANE 6 on KEMIPOX or PU AQUEUX | | | |
| | Temperature | + 10°C | + 20°C | + 30°C |
| | Mini | 24 hours | 12 hours | 8 hours |
| | Maxi | 4 days | 2 day | 1 day |
| Drying / Start-up time | Temperature | + 10°C | + 20°C | + 30°C |
| | Light loads | 20 hours | 12 hours | 8 hours |
| | Full cure | 14 days | 7 days | 5 days |
| These data are only indicative because the curing time varies according to the drying conditions (temperature and relative humidity in particular) | | | | |

Cleaning tools

Tools are cleaned with acetone or MEK immediately after use. In the cured state, the product can only be removed mechanically.

Notes on the application / limits

- Substrates should not be under water pressure or condensation during the application and polymerization of SOUPLETHANE 6
- Protect SOUPLETHANE 6 from contact with moisture, condensation and water for 2 hours
- Incorrect treatment of substrate defects will reduce the life of the coating.
- Beware of the gas exchange that may be caused by a warming of the substrate before the total polymerization which may lead to a bubbling (blistering) phenomenon. It is recommended to work by down temperature.
- To avoid color differences, it is necessary to use a single lot number for each site.
- An exposure of the coating under UV may alter its color or appearance, but without impairing its mechanical performance.

Qualifications

Fire resistance: Bfl-S1

European flooring standards : N°RSET -09-260138

HQE A++ / Class A+ : Regulatory Labeling of VOC Emissions and Compliance with the AgBB Protocol (2012)