

SOUPLETHANE 5

Two-component solvent free resin providing a continuous and pinhole free liquid membrane for waterproofing, corrosion protection or floor coating. Applicable manually (brush, roller) or by airless spray equipment

AREAS OF USE : ENERGY (WIND)

CONCRETE BODY

CHARACTERISTICS

Chemical nature	Polyurea-urethane	Mixing ratio	3 / 1 in volume
Solvent free	100 % solids - odourless	Density (at 20°C)	1.3 g / ml (Mixture A+B)
Flash points	≥ 200°C (components A & B)	Pot life	20 min
UV resistance	no chalking	Fire rating	Bfl-S1
Elongation at strength	60 %	Tensile Strength	18 MPa
Compression strength	113 MPa	Bond strength on concrete	without primer ≥ 2 MPa with primer ≥ 3.5 MPa
Resistance to provoked cracks (4.9 mm at 23°C / 2.7 mm at -5°C) and ability to crack bridging		Resistance to the diffusion of Chloride ions (diffusion coefficient : ≤ 10 ⁻¹⁴ m ² .s ⁻¹)	
Resistance to hydrolysis : up to 95°C		Resistance to backpressure : up to 10 bars	
Chemical resistance (cleaning agents, bleach, acids, bases (1 ≤ pH ≤ 13), ...)		No development of bacteria or fungi contamination	
Water permeability : nil		No shrinkage	

SURFACE PREPARATION	<ul style="list-style-type: none"> . All surfaces must be dry, clean and free from contamination according to DTU 21 (Execution of concrete structures) . Sandblasting or grinding with dust removal may be used to produce a sound surface with adequate profile. . In case of uneven concrete surface (blow holes, surface imperfections), sprinkle controlled dry clean silica (0.1/0.5) over the PU Aqueux primer – remove the excess once dry before the application of the Souplethane 5 resin . On metallic substrates, HP water-jet etching and sand blasting of corroded parts 	
PRIMER	<ul style="list-style-type: none"> . Application of PU AQUEUX primer with a roller (150 gr per sqm), compatible with wet surfaces . Let it dry for 12 hours before the application of the SOUPLETHANE 5 resin 	
APPLICATION CONDITIONS	<ul style="list-style-type: none"> . Substrate temperature : -20°C < T° > +70°C and 3°C above the Dew point . Relative humidity rate : < 95% 	
APPLICATION of SOUPLETHANE 5	Coating thickness : 3 mm (ca. 4 kg per sqm) with glass roving reinforcement (500 gr per sqm) (roller, notched comb) - all over the surface <i>this thickness recommendation may vary depending on the environment - to consult us</i>	
TREATMENT OF SINGULAR POINTS	<i>Concrete body / steel tower connection :</i> fill the gap with a flexible PU joint to bridge it before applying the Souplethane 5 resin	
QUALITY CONTROL	<ul style="list-style-type: none"> . Visual control (uniform colour, no blistering, no soft areas, no adhesion loss, ...) . Holiday testing with a spark detector at 3 kV (no porosity allowed) 	<ul style="list-style-type: none"> . Coating thickness . Shore A / D Hardness . Adhesion (pull-off test)
FINISHES	Non slippery surface	- Controlled (0.4 / 0.8) silica : before curing of the 2nd layer of Souplethane 5, sprinkle silica. Once cured, remove the excess of free silica - Apply a thin layer (ca. 250-300 gr per sqm) of Souplethane 5 to close the coating system.
	UV stable surface	Apply coloured ASPIC Clear (same colour as the Souplethane resin) with a roller - Consumption: 250 gr per sqm