



KEMICA COATINGS
Reinventing coatings

DRINKING WATER

FROM WATER CATCHMENT TO DISTRIBUTION

A BISPHENOL A-FREE SEALING
ACS CERTIFIED

French standard for contact with drinking
water



bio-based



sustainable



eco-friendly

100%

waterproofing
anticorrosion
non flammable
antifouling
antibacterial

0%

solvent
toxicity
VOC
BPA



Summary

WATER CATCHMENT

OUTSIDE

INTERIOR

NEUTRALIZATION STATIONS

WATER TANKS

OUTSIDE

INTERIOR

VALVE ROOM

OUTSIDE

INTERIOR

DISTRIBUTION / PIPES

SOUPLETHANE

Solvent-free resin range

Inspired by nature



biosourcé



durable



écologique

Our range of resins guarantees waterproofing and anti-corrosion protection from the water catchment to the distribution by treating both the interior and the exterior on new or old substrates.

The SOUPLETHANE WP two-component, solvent-free and odorless polyurea-urethane resin is ACS approved for direct contact with drinking water (product complies with the French ACS standard for contact with drinking water).

It is now being offered as an alternative to epoxy resins to meet future regulatory requirements for CMRs. (Cf. *ANSES • Referral study report "n°2010-SA-0197" page 74 / 201 March 2013*)



QUALIFICATIONS

ACS certificate : EUROFINS

Tests: VERITAS - LCPC : Ability to bridge cracks in concrete with an opening of 3 to 5 mm (for a 2 mm thick film)

IRM test : no development of bacteria in contact with the coating. - Resistant to concentrated chlorine solutions (cleaning)

Easily repairable by re-applying the resin to the old one after light sanding (**VERITAS test**)





WATER CATCHMENT

OUTSIDE
INTERIOR

WATER CATCHMENT

EXTERIOR

ROOFING SLAB/ WATER CATCHMENT

Waterproofing of the roof slab

Preparation :

Sanding, dusting of the concrete slab

Primer PU AQUEUX 150 g/m²

Spalling recovery with **SOUPLETHANE 5-6 PUTTY**

1st **SOUPLETHANE 5** waterproofing layer with a roller,

At Refusal sprinkling of mineral fillers 5 mm fresh on fresh

the next day secretion of the mineral charge and dusting

2nd layer covering with **SOUPLETHANE 5**

Total consumption :1.5 kg/m²

The next day application of a UV-stable topcoat

ALPIC (optional)





WATER CATCHMENT

INTERIOR

INTERNAL SEALING OF A CATCHMENT

Creation of a by-pass to ensure the continuity of water distribution

Preparation : sanding or mechanical milling, stitching of non-adherent plaster, dust removal and drying

Spalling recovery with **SOUPLETHANE 5-6 PUTTY**

Application of a layer of **SOUPLETHANE WP** resin with a 2 mm thick thixotropic formulation

The next day following thickness applied, removal of the bypass

Disinfection, washing and recommissioning





NEUTRALIZATION STATIONS

NEUTRALIZATION STATION

SEALING OF DRINKING WATER NEUTRALIZATION PLANTS

Preparation :

sanding or mechanical milling, dust removal and drying

PU AQUEUX Primer 150 g/m²

Spalling recovery with **SOUPLETHANE 5-6 PUTTY**

Treatment of singular points (each joint of the concreting will be treated with a 280 g/m² multidirectional fiberglass strip of the **KEMTEX** type bonded to the **SOUPLETHANE WP** resin)

Each seal will be reinforced with **SOUPLETHANE 5-6 PUTTY** resin

Waterproofing, Application of **SOUPLETHANE WP** with a roller in several layers, application of 2.6 kg/m² i.e. a continuous film of 2 mm

Installation of slabs and nozzles by the GC lot

Waterproofing of slab junctions and reinforced concrete walls with

SOUPLETHANE 5-6 PUTTY

Waterproofing test

Disinfection and commissioning





WATER TANKS

OUTSIDE
INTERIOR



WATER TANK

EXTERIOR - DOME

Stripping of the earth on the dome of the water tank at - 30 cm from the dome belt

Preparation of the substrate : HP washing, sanding, milling, stitching of any non-adherent concrete and dust removal - drying

Application of the 150 g/m² **PU AQUEUX** primer (be careful not to forget the upstands and peripheral fallouts)

Treatment of spalling, upstands, cracks with **SOUPLETHANE 5-6 PUTTY**

Upstands : : installation of a 280g/m² multidirectional fiberglass of the **KEMTEX** type,

Anti-root sealing : application of **SOUPLETHANE 5** with a roller in several coats - consumption : 2.6 kg/m² or a continuous film of 2 mm (common surface : raised and falling)

Installation of a garden felt to prevent punching on the resin and repositioning of the soil

Don't forget to create a perimeter drainage to collect the runoff water from the dome



WATER TANK INTERIOR

Site installation : Ventilation and air drying

Preparation of the substrate : sanding, milling and stitching of any spalling, HP washing and drying of the water tank

Pull-out test to be carried out on old concrete 1 MPa minimum / on new concrete – 1.5 MPa

Treatment of special points

Under the dome : repair of spalling and cracks, removal of oxidation of scrap by any means, rework with **SOUPLETHANE 5-6 PUTTY**

Junction treatment with 350 g/m² multidirectional fiberglass under ACS and bonded with **SOUPLETHANE WP** resin

Reinforcement of any seal with **SOUPLETHANE 5-6 PUTTY**

Waterproofing according to classification standard new fascicle 74



Without glass fabric :

Application of **SOUPLETHANE WP** with a roller in several coats at a rate of 2.7 kg/m², i.e. a 2 mm film

With glass fabric :

Coating and debubbling with metal roller on the 1st layer of a multidirectional fiberglass under ACS 350 g/m² **SOUPLETHANE WP**

Covering with **SOUPLETHANE WP** - Total consumption : 3 kg/m² or a continuous film of 2.20 mm

Porosity test : holiday detector

Disinfection and bacteriological analysis

Commissioning of the structure



WATER TANK

DOME INTERIOR

Waterproofing treatment under the dome of the water tank

HP Wash substrate preparation

Spalling recovery **SOUPLETHANE 5/6 PUTTY**

3-coat **KETANCHE** application with a roller

Consumption 450 g/m²





CHAMBER OF THE VALVES

OUTSIDE
INTERIOR

CHAMBER OF THE VALVES

EXTERIOR - ROOF VALVE CHAMBER / TRAFFICABLE

Preparation of the substrate : mechanical sanding of the BA slab and dust removal

Application of the **PU AQUEUX** primer in 2 coats, i.e. 300 g/m² and vapour barrier

Treatment of singular points : Spalling treatment with **SOUPLETHANE 5-6 PUTTY** – installation of a multidirectional tape such as KEMTEX : bonding of the incompressible insulation with **SOUPLETHANE 5 COLLE**

Interlining with a PVC tape of the insulation joints to create non-adhesion of the waterproofing coating

SOUPLETHANE 5 ATE waterproofing layer with 350 g/m² multidirectional fiberglass interlining between the 2 layers
Total consumption : 3.9 kg/m², i.e. a continuous 3 mm trafficable sealing film

ALPIC UV Stable Topcoat 300 g/m² with a Roller application



CHAMBER OF THE VALVES

INTERIOR - ROOF VALVE CHAMBER / TRAFFICABLE

Protection of the installations

Preparation of the substrate : HP washing,
stitching of any spalling

Treatment of singular points: treatment of
spalling with **SOUPLETHANE 5-6 PUTTY**

Application of waterproofing resin for
ceilings, cladding or floors with **KETANCHE**
in 2 coats with a roller

Total consumption : 300 g/m²





DISTRIBUTION / PIPES

DISTRIBUTION – PIPES

IN SITU REHABILITATION OF BURIED PIPELINES

Steel pipes, cast iron : drinking water, wastewater, oil, gas.

Corroded, pierced or cracked pipes

Concrete or fiber cement pipes :

- .cracked

- . .corroded, and worn by abrasion

PVC pipes :

- . cracked

- . Block the release of carcinogenic PVC monomers (polyvinyl chlorides) into water

Bridging of existing cracks with an opening of 1 cm to ensure the waterproofing of a leaking pipe.

SOUPLETHANE WP resin can be applied by spraying in a single layer up to 1 cm thick, without dripping or creep of the resin along the wall.

Applied to a 1 cm thick metal pipe, it can maintain the tightness of the pipe in the event of cracks created in the steel with an opening of 2 to 3 mm.



REDUCED PRESSURE DROPS : for the same pumping power, 30% increase in flow rate

VERY GOOD SUBSTRATE WETTABILITY

FAST COMMISSIONING (6 hours max) – the resin polymerizes in immersion

ESTIMATED LIFESPAN : minimum 40 years old



**Discover the entire range of SOUPLETHANE
solvent-free resins as well as :**

Our innovations and news
Our qualifications and performance
Our recommendations and solutions
Our implementations and application techniques
On our website : www.kemica-coatings.com



**PRESENT IN FRANCE AND INTERNATIONALLY, KEMICA COATINGS
offers delivery solutions adapted to the practices of its customers.**