

UltraFlex PW is a two-component, thixotropic, solvent-free (100% solids), aromatic polyurethane liquid membrane suitable for permanent contact with water for human consumption. Once catalysed, it forms a continuous elastic membrane with no seams or overlaps. Its excellent properties make it the ideal choice for creating perfectly sealed, watertight surfaces in constant contact with drinking water. Applied manually with a roller or brush.

UltraFlex PW has obtained CE marking. Declaration of Performance (DoP) compliant to regulation (EU) 305/2011. Suitable for use in cases of permanent contact with water intended for human consumption. WRAS (Water Regulation Advisory Scheme) approved material under British Standard BS-6920 "Suitability of non-metallic materials and products for use in contact with water intended for human consumption with regards to their effect on the quality of the water", NSF International Laboratories. Material compliant with the requirements set out in Spanish Royal Decree RD140/2003 and its amendments included in RD902/2018. Report No. 1246036-2 (1/09/2021). Tested according to standard EN-12873 "Influence of materials on water intended for human consumption. Influence due to migration."

USES

Waterproofing of cisterns, tanks, channels and other container systems intended for drinking water, and which are made from concrete and sheltered from sunlight.

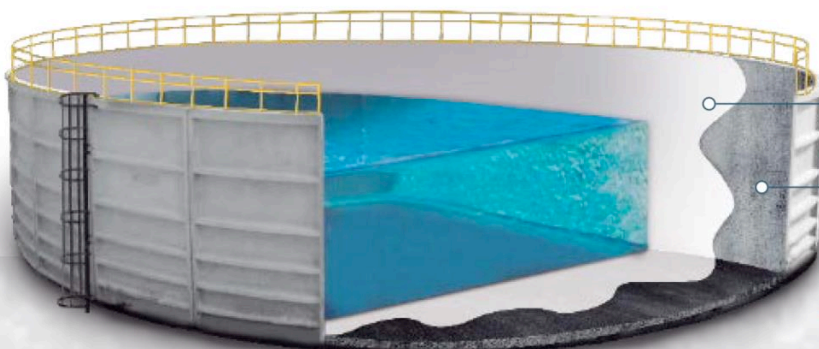
Coverage	2-2.5 kg/m ²
Recommended thickness	± 1.5-2.0 mm
Drying time	± 4.5-6.5 h (at 23 °C)
Elongation at break	> 110% (at 23 °C)
Tensile strength	> 10 MPa (at 23 °C)

GENERAL FEATURES

- Once applied, UltraFlex PW forms a durable, elastic, watertight membrane with excellent wear resistance and stability. With no seams or overlaps, it provides a uniform, continuous finish that is easy to clean and maintain.
- Applied in coats about 0.8-1 mm thick, the final total thickness is around 2 mm (coverage of 2-2.5 kg/m²). Thanks to its thixotropic behaviour, UltraFlex PW is both suitable for and easily applied to vertical surfaces.
- It can be applied to individual areas and joints with other constructive elements.
- The membrane should not be exposed to direct sunlight.
- Avoid applying it to surfaces with humidity caused by negative pressure, whether at the time of application or after that. If unavoidable, apply a barrier system before UltraFlex PW.



UltraFlex PW is compliant with standard EN-12873. Material analysed by an external laboratory, report No. 1246036.



Ultraflex PW

Concrete



TECHNICAL SPECIFICATIONS

PROPERTY	VALUE
Specific weight ISO 1675	1.38 ± 5% g/cm ³ (23 °C)
Viscosity (A+B) ISO 2555	12,500 ± 200 cps (23 °C)
VOCs	0
Solids content ISO 1768	100%
Pot life	30–35 min (23 °C)
Tensile strength ISO 527-3	> 10 MPa (23 °C)
Elongation at break ISO 527-3	> 110% (23 °C)
Tear strength ISO 34-1	36 N/mm
Reaction to fire	NPA
Application temperature range	5–35 °C (ambient temp.)
Liquid contents temperature range	-20 °C to +60 °C (max. 80 °C for 24 h)
Shore A hardness DIN 53.505	> 80 (23 °C)
Shore D hardness DIN 53.505	> 50 (23 °C)
Initial drying time	± 5–6.5 h (23 °C & 55% RH)
Second coat	± 6–24 h
Adherence to concrete	> 1.5 MPa (23 °C)

* Approximate values. They may vary depending on the temperature, humidity or application method.

APPLICATION GUIDE

Preparing the surface.

Remove any remains of previous waterproofing treatments, remove any unevenness and repair any cracks or depressions in the surface with a filler (epoxy mortar or another 100% solids system). Clean any dirt, grease, dust or efflorescence from the surface, preferably using a dry method (brushing or suction). Before applying UltraFlex PW, make sure the surface is solid and dry, with no residual or capillary moisture. When applying to concrete, it is important to remember that concrete takes around 28 days to cure. The concrete should be sanded, ground, polished or sandblasted to eliminate any release agents and grouts, thus obtaining a solid, open-pore surface. Avoid applying UltraFlex PW directly over water-repellent materials and/or those with wax- or silicone-based additives. Use polyurethane or MS polymer-based putties (e.g., UltraFlex A&S) to seal cracks, joints or surfaces irregularities.

Application in coats

Stir the two UltraFlex PW components (comp A and comp B) together, either manually or using a mixer at a low speed, until it produces a uniform mixture. Spread the resulting product using a short-nap roller in coats of 0.8–1.0 mm.

Once the first coat has cured completely (about 5 hours depending on weather conditions), apply a second coat following the same method. UltraFlex PW can be applied in as many coats as considered convenient, provided the membrane has a total thickness of 1.5–2.0 mm. Clean the membrane 2 days after its application using a neutral soap to remove any unwanted remains or residues. The structure can be used to hold water after 6–7 days.

Repairs

Whether because new structures need to perforate the membrane or due to accidental damage, the UltraFlex PW membrane can easily be repaired following the method given below. Cut and remove the membrane from the affected area. Sand the surface of the damaged support material and prepare a 25 cm perimeter so there is enough room for the overlap. Remove any residues using dry suction or ketone-based solvents. We do not recommend wet methods. Apply UltraFlex PW to the affected area and overlap perimeter following the application guide. When creating overlaps because more than 48–72 hours has passed between the application of coats, follow the repair method explained above, but this time sanding a 25 cm strip at the edge of the last coat.

PACK SIZES: Kits of 12.2 kg + 2.8 kg in metal containers. Colour: white.

SHELF LIFE: 12 months, store unopened in its original packaging and in a dry place at 5–35 °C.

TRANSPORT AND HANDLING: These safety recommendations are applicable during the product's application, as well as before and after, or during exposure when filling equipment. Skin protection: wear gloves and wash immediately in the event of contact. Wear clean clothes that cover the body. Wash thoroughly with soap and water after using the product and before eating, drinking or smoking. Any contaminated clothing should be dry cleaned. Eyes/face: wear safety glasses to prevent splashes. Waste: Try not to produce, or at least minimise, any waste. Incinerate under controlled conditions in accordance with local and national laws and regulations. See the product's safety data sheet for more information.

