



CS 100 – U2K

Two-component, solvent less, polyurethane membrane for tank waterproofing

Product

CS 100 –U2K is a two-component, solvent-free, thixotropic coating, which is based on high quality elastomeric polyurethane resins. After polymerization, it produces a strong, elastic and hydrophobic membrane suitable for waterproofing and protection. It is recommended for waterproofing of water tanks and suitable for use in potable water tanks.

Apply with roller in two coats with consumption per coat of 0,7 kg/m². On the tank floor, a single coat of 1.4 kg/m² is sufficient.

Primary applications

Waterproofing and protection of:

- ✓ water tanks made of concrete, steel or other material
 - ✓ prefabricated concrete tanks
 - ✓ drinking water tanks
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Advantages

- ✓ Excellent adhesion on almost any type of substrate.
 - ✓ Being solvent-less, it can easily be applied in closed spaces.
 - ✓ Good chemical resistance.
 - ✓ Wide working temperature range: -40 °C to 90 °C.
 - ✓ Certified for potable water tanks, in accordance with the latest European Union requirements.
 - ✓ Highly hydrophobic and hydrolysis resistant.
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TECHNICAL DATA

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Packaging (kg)		Color	
9 kg (A 1.5 kg, B 7.5 kg) liquid	24 kg (A 4 kg, B 20 kg) thixotropic paste	Off-White	Grey
Recommended Thickness		Shelf Life	
Main Membrane 0.5 mm per coat		Can be kept for minimum 12 months in the original unopened pails in dry places and at temperatures of 5-25 °C. Once a pail has been opened, use as soon as possible.	
<p>CS 100 –U2K complies with the following: Directives: EU 98/1983, SI 5452 (2004), AS/NZS 4020 (2002) DIN 53505 / ISO R868, DIN 53217 / ISO 2811</p>			
Liquid			
Solids by weight %	Viscosity (BROOKFIELD) - cP ASTM D2196-86	Density (kg/lit) ASTM D1475	
100	16000-19000	A: 1.15-1.20, B: 1.35-1.45	
Mix Ratio by weight	Recoating Time (hours)		
1: 5	6-48		
Pot Life (25°C)	25-30 min		
Membrane			
Service Temperature		-40°C to 90°C	
Max shock temperature		-	
Curing Details	Foot traffic	12-24 hours	
	Light traffic	3 days	
	Full cure and chemical resistance	7 days	
<p><i>*Note: Times and data mentioned are based on laboratory conditions. Field results may vary and will be affected by changing ambient conditions, especially changes in temperature and relative humidity.</i></p>			
<u>PROPERTIES @ 23°C</u>			



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Adhesion to Concrete (N/mm ²) ASTM D4541	Water Absorption (%) DIN 53495
> 2.2	< 0.5
Hardness (Shore D) ASTM D2240	Tensile Strength at Break (N/mm ²) ASTM D412
> 35	> 18
Percent Elongation (%) ASTM D412	> 120
QUV Accelerated Weathering Test (4hr UV, @ 60 °C (UVB-Lamps) & 4hr COND @ 50 °C) ASTM G53	Thermal resistance (100 days @ 80 °C) EOTA TR011
NPD	NPD

SURFACE PREPARATION

The following guidelines are for concrete tanks. For information about tanks made of other materials, please consult our technical department.

Clean the surface using jet water, if possible. Remove oil, grease, cement laitance, any wax contaminants, loose particles. Fill surface irregularities with the proper polyurethane sealant.

Priming: Apply **CS 100 - PREP** primer particularly in case of negative pressure (e.g. in underground tanks). As soon as the primer has cured, seal any cracks - holes and the edges of the tank walls and floor with the proper polyurethane mastic.

MIXING

Mix the two components using a low speed (300 rpm) mixer. Pot life after mixing the two components is 25-30 min in 25 °C. This may be increased by:

- ✓ Keeping the mix in a cooler place, away from the sun.
- ✓ Pouring the mix in a separate shallow and wide container.
- ✓ Pouring the mix on the floor, in order for it to cool down, and then spreading it.



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APPLICATION

Apply with roller in two coats with consumption per coat of 0.7 kg/m². On the tank floor, a single coat of 1.4 kg/m² is sufficient.

Minimum total consumption: 1.4 kg/m².

CLEANING

Clean tools and equipment first with paper towels and then using pure xylene. Rollers will not be re-usable.

RESTRICTIONS

NOTE: On tank surfaces with direct exposure to sunlight, CS 100 –U2K will discolor. This is purely visual and does not affect the performance of the product.

HEALTH AND SAFETY

Although it does not contain volatile substances, it is highly recommended that closed spaces be well ventilated to recycle the air in which people will work. The possibility of methane gas coming from the ground and being trapped in the tank should also be considered. The MSDS (Material Safety Data Sheet) is available on request.

IMPORTANT NOTICE

The information and recommendations contained in this document are based on reliable test results according to ICR COATING SYSTEMS. The data mentioned are specific to the material indicated. If used in combination with other materials, the results may be different. It is the responsibility of the user to validate the information therein and to test the product before using it. ICR COATING SYSTEMS assumes no legal responsibility for the results obtained in such cases. ICR COATING SYSTEMS. assumes no legal responsibility for any direct, indirect, consequential, economic or any other damages except to replace the product or to reimbursement the purchase price, as set out in the purchase contract.
