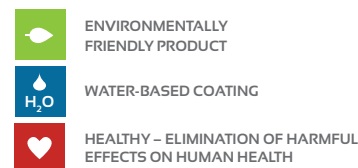


Vulmsidizol TW



Protective coating for concrete for contact with technical water

Product description:

Vulmsidizol TW is a two-component water-based composition intended for the production of waterproof insulation system, developed on the basis of hydraulic binders, modifying additives and fillers. It fills and seals pores and cracks with thickness of up to 0.3 mm, and creates a perfect protection against moisture, water and carbon dioxide. It is resistant to UV radiation. The product increases the resistance of concrete against the effects of alkali (urea), de-icing and gritter salts, weak acids, atmospheric factors (acid rain, smog) and against the effects of many organic solvents and diluents. After application, the coating has very low gas permeability ($K = 0.38$ FPM); it is resistant to heavy mechanical stress and the surface has non-skid properties. Insulating coatings withstand pressure of up to 1.0 MPa.

Use:

As a protective coating of concrete storage tanks for water intended for industrial use, **Vulmsidizol TW** is intended to be used for surfaces exposed to severe weather conditions especially concrete, cement and lime plasters, fibre-cement boards, chlorinated rubber coatings. Its application is also in open pools, which require solely disinfection by chlorination.

Characteristics / Benefits:

- high stability of the colour and stability to dechalking
- high resistance to water and chemicals
- overcoatability of old chlorinated rubber coatings
- easy cleaning and disinfection
- prolonged periods of treatment
- resistance to chlorinated water present in the pools and common detergents

Test data:

Conformity Certificate	1301-CPD-0199 EN 1504-2:2004
TSÚS 151/2006	STN EN 1062-6 (67 2020)
	STN 67 3012
	STN 67 3016
	STN ISO 1515 (67 3031)
	STN 73 2577
	STN 73 2578
	STN 73 2579
	STN 73 2582
	STN 77 0332
	STN 74 4507:1981

P 50 1709 Determination of anti-slip properties of floor surfaces

Product data:

colour:	RAL according to customer's choice
appearance:	matte, semi-gloss
shelf life:	12 months in original packaging in dry conditions at a temperature 1 – 35 °C, individual components separately Protect from frost
limit VOC:	according to Ministry of Environment Decree no.127/2011 Coll.,: 40 g/l Measured value: 3,22 g/l

Physical data:

solids content:	52 %
viscosity:	2,5 dPa.s
adhesion to the substrate:	1,62 MPa
after freez. cycles:	1,51 MPa
abrasion resistance:	over 60 md/1000 cycles
handling time:	6 – 8 hodin after mixing with component B
component B (dry):	bulk density 1400 kg/m ³
density:	
component A:	1,35 g/ml
component A + B:	1,50 g/ml

Theoretical capacity:

3,3 – 6,7 m²/kg one layer, depending on the grading of the substrate

Processing temperature:

minimum temperature of the substrate:	5 °C
maximum temperature of the substrate:	30 °C
ideal temperature for processing:	20 °C
maximum relative air humidity:	85 %

Substrate:

Surface must be firm, intact and coherent. Before application, it must be degreased and cleaned of dust and dirt by washing, preferably with high pressure fresh water. The area should be dry, or slightly moist (up to 12%). **Vulmsidizol TW** coating cannot seal active cracks and fissures thicker than 0.3 mm.

Old coatings:

Old, well-sealed chlorinated rubber coatings cleaned of oil, grease and pollution must be mechanically roughened, for example by steel brushes or abrasive sponges. Particular attention should be paid to verify adhesion of old coatings. Coatings with cracks and peeling surfaces must not be re-coated.

Instructions for use:

The impregnation agent (**Vulmpropen**) is applied on the clean substrate.

After 2 – 4 hours apply **Vulmsidizol TW** diluted with water. The procedure is as follows: Mix **Vulmsidizol TW** – component B with water in a ratio of 0.3 l of water : 0,0268 kg of component B and then add it to 1 kg of **Vulmsidizol TW** – component A.

After 4 – 6 hours it is possible to apply **Vulmsidizol TW** – component A (no more dry component) in a ratio of 1 kg : 0,2 l of water. The optimal method is to use the cross-layering. The surface is walkable after 6 hours after application and can withstand the full load after 24 hours. It is not recommended to form an overall thickness of more than 1 mm of the wet film.

Limitations:

At a higher concentration of chlorine and ozone in water (see DIN 19643-2) there is a risk of dechalking, blanching. If necessary, you can apply a refresh coating for optical reasons.

Cleaning of tools:

Immediately after use, with water.

Resistance:

- withstands high mechanical loads
- resistant to chemicals, solvents, detergents and cleaners
- resistant to UV radiation, penetration of liquids and gases

Safety:

Vulmsidizol TW – when handling, proceed in accordance with the general safety measures, follow the safety instructions on the packaging labels and on safety data sheets. Data, specifications, directions and recommendations given in this technical data sheet are based on experience gained in modeling of supposed ways of applications, or under specially defined conditions. Their accuracy, completeness or appropriateness under the actual conditions of any intended use is not guaranteed and must be determined by the user. The manufacturer and distributor are not responsible for the results achieved, loss, direct or consequential damages arising from failure to comply with the recommended use of the product, which go beyond the conditions herein.

Category and sub-category of a regulated product:

A/c/VR: Exterior paints for the surface treatment of inorganic materials. The limit value for the highest content of volatile organic compounds: 40 g/l.

The highest content of volatile organic compounds in the state in which the regulated product is ready for use: 3.22 g/l.

The initial tests verified:

Property	Declared value or class	Number of test report and laboratory reference
Capillary absorption and water permeability	< 0,1 kg/m ² .h ^{0,5}	Test Report no. 90-13-0010 dated 16.01.2013
CO ₂ permeability (equivalent diffusion thickness) (m)	> 50	Test Report no. 90-13-0010 dated 16.01.2013 Test Report no. 90-13-0010 dated 16.01.2013
Water vapour permeability – equivalent diffusion thickness	class I < 5 m	Test Report no. 90-13-0010 dated 16.01.2013
Adhesion in pull-off tests	0,8 N/mm ²	Test Report no. 90-13-0010 dated 16.01.2013
Resistance to temperature changes – cyclic exposure to storm rain	After the test without blistering, cracking, or peeling, adhesion strength 0,8 N/mm ²	Test Report no. 90-13-0010 dated 16.01.2013
Resistance to temperature changes – ageing 7 days at 70 °C	After the test without blistering, cracking, or peeling, adhesion strength 0,8 N/mm ²	Test Report no. 90-13-0010 dated 16.01.2013