

Vulmkoriz-R



ENVIRONMENTALLY FRIENDLY PRODUCT



WATER-BASED COATING



HEALTHY – ELIMINATION OF HARMFUL EFFECTS ON HUMAN HEALTH

Product description:

Vulmkoriz-R is a unary, water soluble material for concrete structures developed on the basis of a copolymer aqueous dispersion and special additives. It cures in the air and creates a sturdy, permanently flexible, chemically cross-linked coating film insoluble in petroleum products and water. The product has excellent adhesion and can withstand moderate to severe mechanical stress.

Use:

Vulmkoriz-R is a multi-use (base and top) coating for on concrete, asbestos-cement structures, etc. In particular, we recommend its use in cases where the substrate is in direct contact with petroleum products (gasoline, diesel, kerosene, jet fuel, oils, etc.).

Benefits:

- abrasion-resistant
- good chemical and mechanical resistance
- resistance to raw water and all petroleum products
- resistant to chemicals, solvents, detergents and cleaners
- resists water penetration
- frost resistant

Test data:

EN 150-2 Products and systems for the protection and repair of concrete structures. Definitions, requirements, quality control and evaluation of conformity.

Part 2: Systems for the protection of concrete surface.

Product data:

colour: RAL – according to customer's choice

appearance: matte, semi-gloss

shelf life: 24 months in original packaging in dry conditions

at the temperature $5-35\,^{\circ}\text{C}$

Physical data:

solids content: 66 %
viscosity: 7,5 dPa.s
abrasion resistance: over 20 min.
density: 1,35 g/ml
adhesion to the substrate: over 1,92 MPa
water resistance: 0 1.m² per 30 min.
frost resistance: 1,74 MPa after 20 cycles

Theoretical capacity:

3,3 - 6,7 m²/kg one layer, depending on the substrate roughness

Processing temperature:

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minimum temperature of primer and air: 5 °C above the dew point

maximum temperature of the substrate: 30 °C ideal paint temperature: 15-22 °C



Substrate:

Suitable substrates are concrete structures. The substrate must be coherent and sufficiently bearing, without dirt, grease and loose particles.

Instructions for use:

Apply the anchor coat of Vulmkoriz-R diluted with water on a dry or slightly damp substrate in a ratio of 1 kg: 0.1 l. After drying (approx. 4 hours) apply another coat, i.e. mix of the paint material and water in the same ratio of 1 kg: 0.1 l. We recommend 2-3 coating layers.

Time data for application:

dry to touch: approx. 4 hours re-coating interval: approx. 4 hours

cured: approx. 24 hours completely

at a relative air humidity of 65 % and temperature of 23 °C

Cleaning of tools:

Immediately after use, with water.

Safety:

Vulmkoriz-R 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:

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AA/i/VR: Special one-component coatings. The limit value for the highest content of volatile organic compounds: 140 g/l. The highest content of volatile organic compounds in the state in which the regulated product is ready for use: 117.3 g/l.

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The initial tests verified:

Property	Declared value or class	Number of test report and laboratory reference
Capillary absorption and water permeability	< 0,1 kg/m². h 0,5	Test Report no.151/2006 dated 13.04.2006
		TSÚS, n.o., branch Tatranská Štrba
CO ₂ permeability	> 50	Test Report no.151/2006 dated 13.04.2006
		TSÚS, n.o., branch Tatranská Štrba
Water vapour permeability – equivalent diffusion thickness	class II from 5 m to 50 m	Test Report no.151/2006 dated 13.04.2006
		TSÚS, n.o., branch Tatranská Štrba
Adhesion in pull-off tests	0,8 N/mm ²	Test Report no.151/2006 dated 13.04.2006
		TSÚS, n.o., branch Tatranská Štrba
Resistance to temperature changes – cyclic exposure to storm rain	After the test without blistering, cracking, or peeling,	Test Report no.151/2006 dated 13.04.2006
	adhesion strength 0,8 N/mm ²	TSÚS, n.o., branch Tatranská Štrba
Resistance to temperature changes – ageing 7 days at 70 °C	After the test without blistering, cracking, or peeling, adhesion strength 0,8 N/mm²	Test Report no.151/2006 dated 13.04.2006 TSÚS, n.o., branch Tatranská Štrba

Product description and purpose and method of use in the structure:

VULMKORIZ-R is a single-component coating material based on copolymer aqueous dispersion. It is used to improve the durability of concrete and reinforced concrete structures.

Name and address of authorized person:

Building Testing and Research Institute, n.o., Studená 3, 826 34 Bratislava

Certification of the factory production control number.

1301 - CPD 0199

Used non-standard method:

none

Information on measurement uncertainty:

They are specified in tables of measured values in the form of the combined measurement uncertainty.

Results of measurement:

1. Water resistance (l.m⁻² per 30 min)

Sample no.	Water	Petrol	Diesel	Heating oil	Transformer oil
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
Arith. mean	0	0	0	0	0
C.m.u.	0,042	0,042	0,042	0,042	0,042



2. Absorptivity of the paint film after 72 hours (%)

Sample no.	Water	Petrol	Diesel	Heating oil	Transformer oil
1	0,216	0,188	0,106	0,097	0,097
2	0,209	0,201	0,101	0,096	0,096
3	0,208	0,204	0,108	0,104	0,104
Arith. mean	0,211	0,198	0,105	0,099	0,099
C.m.u.	0,0036	0,0069	0,0030	0,0036	0,0036