

FORTISOL®

Serial Number 9510

Universal waterproof sealing compound for insulation and protection of building structures from concrete and steel

Features:

FORTISOL is a two component waterproofing sealing material with a moderate proportion of plasticity. It creates a seamless waterproofing layer with excellent adhesion to concrete. The hardened layer of waterproofing material is hardy, resistant to water pressure, even when the pressure is directed in the direction of the surface (ground water). **FORTISOL** can be applied on damp and not fully mature concrete. **FORTISOL** protects concrete structures against aggressive atmospheric influences. It prevents the penetration of CO₂ and SO₂ into concrete construction of underground tunnels and canals and water works. It also prevents the penetration of radon from the soil.

Usage:

FORTISOL is designed for exterior and interior insulation building materials, structures and foundations from ground waters in both new and old buildings. It also serves as protection of steel, concrete and reinforced concrete structures from water, moisture, atmospheric effects and corrosion. It can be also used as insulation under the tiles in bathrooms, swimming pools, water tanks. It is also suitable to insulate tanks, septic tanks, sewers and underground tunnels, and water works and water pressure acting against the pressure in the direction of the substrate to 50 m below the ground water. On concrete surfaces, it can withstand constant exposure to water. (Not applicable to applications on metal surfaces). It is suitable as a bonding agent for additional placement of concrete to protect steel reinforcement from corrosion.

Technical data:

Mixing ratio (wt. parts)	3 (comp. A) : 1 (comp. B)
Mixing time	5 minutes (mixer 300 rpm/min.)
Processing time	60 minutes
Working temperature	5 °C to 30 °C
Specific weight	min. 1,6 g/cm ³
Frost resistance	min. 25 cycles
Water resistance	0,0 l/m ² per hour
Surface adhesion	1,2 MPa (concrete, ceramic tiles)
Tensile strength after 28 days	min. 1,5 MPa
Compressive strength	min. 20 MPa
Penetration of radon (at 1 mm penetration)	reaches half the 300 000 s

Consumption:

- 1,0–1,5 kg/m² in non-pressure insulation facings (1 layer)
- 2,0–3,0 kg/m² with insulation up to 1m below ground level to ground moisture and water pressure (2–3 layers)
- 4,0–6,0 kg/m² with insulation from 1 m to 50 m below ground level to water pressure acting on the surface (3–4 layers)

Shades:

gray

Packaging:

20 kg (Component A - 15 kg loose, Component B - 5 kg liquid)

Storage:

Dry ingredient – in a dry place in tightly closed original containers from 5 °C to 30 °C.

The liquid component – in original tightly closed containers from 5 °C to 25 °C. It must not freeze!

Surface preparation:

The surface must be as written below for **FORTISOL**:

- smooth (tensile strength perpendicular to the surface at least 1,5 MPa)
- cleaned from loose particles and grease (**ETERNAL odmašťovač** concentrate solution or other suitable detergent)
- repaired (repair damaged places, potholes, joints, etc.), materials which are suitable for repairing – **FORTE vyrovnávací hmota, FORTE opravný beton**
- damp, (not wet) or primed with **FORTE penetral**
- highly polished surfaces are recommended to be roughened (blasting, grinding)

Repairing the surface:

- Gaps and unevenness in the substrate must be repaired by **FORTE vyrovnávací hmota, FORTE opravný beton**, or cement mortar. The surface must allow for continuous application of coatings.
- Water leaks must be stopped before the application of **FORTISOL** by convenient sealant. Following sealing, it is appropriate to ensure that these places are reinforced with fiberglass material pressed into **FORTISOL**.
- The corners and edges of the walls must be reinforced with fiberglass cloth or use a **flexible sealing strip FORTE** into the **FORTISOL**, connecting the floor to the wall with cement mortar fillet and reinforced with fiberglass or use a **flexible sealing strip FORTE**.

Application:

Pour **FORTISOL** component B (liquid) into a clean container, while slowly stirring sprinkle **FORTISOL** component A (loose). The mixing ratio of components is 3 wt. parts of component A with 1 wt. part of B until the waterproofing material is perfectly mixed, preferably with an electric drill with a mixer to eliminate lumps and froth (at least for 5 minutes). After this time the material should be left for 5 minutes and mixed briefly again. Apply by brush or stainless-steel trowel on the prepared surface at least 4 hours after application of the primer. It can be applied in layers no thicker than 1 mm, which corresponds to the consumption of 1,0 to 1,3 kg/m². A break between each of the layers should be at least 24 hours. During the curing, the waterproofing material must not come into contact with water. During the insulation work, it is necessary to prevent ejections of water using a convenient fast-hardening sealant and after the repaired spot has hardened, apply **FORTISOL** as described above.

Warning:

Insulation **FORTISOL** waterproofing compound must be protected against mechanical damage and must not come into contact with substances containing aggressive solvents. Tools should be washed with water immediately after usage.

Certification:

TZÚS Prague Authorized Person No. 204

Waste disposal:

Described on safety data sheet of the product.

Safety and hygiene at work:

Component A: Causes serious eye damage. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and possible. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Dispose of contents/container by incineration in an incinerator or disposal of hazardous waste in landfills for hazardous waste.

Component B: The product is not considered a health hazard. The product is a treated article, contains a biocidal product. It contains a reaction mixture CMIT/MIT (3:1) [Index number: 613-167-00-5]. May cause an allergic reaction. It is necessary to use suitable protective clothing, gloves and goggles. Wash skin with soap and water, in case of contact with eyes, flush immediately with water. If irritation does not stop, seek medical help. If accidentally swallowed, seek medical help. Do not induce vomiting. Other details are on the Safety data sheet of the product.