

BSY-403 / CRYSTALIZED WATER INSULATION MORTAR

PRODUCT DESCRIPTION

It is a waterproofing material that is applied to old and new exposed concrete surfaces in order to provide waterproofing and fills the capillary spaces by penetrating into the concrete. It contains chemicals that turn into crystals by reacting in the applied structure. The crystals settle in the capillary spaces, preventing the passage of water and providing permanent waterproofing.

USAGE AREAS

Bestkim BSY-403 Crystallized Waterproofing Mortar is used in pools, water treatment plants, external insulation of water tanks, elevator shafts and basements, underground garage tanks, tunnels, galleries and structures that are below the water level and affected by water intrusion.

PRODUCT ADVANTAGES

BS-403 provides water impermeability by stopping the progress of water by penetrating the capillary spaces of the crystals. Even after years, the crystals are reactivated by water and moisture infiltrating the concrete. It does not lose its ability to react.

It does not prevent air and partial vapor passage. The applied surfaces breathe.

Since the active substance is insoluble, it does not separate from the surface, does not tear or aging.

It can be applied in both positive and negative directions.

It protects the concrete and reinforcement from chemicals and corrosion by increasing the pH value of the concrete on the applied surface.

It is resistant to freeze-thaw cycle.

It is used by sprinkling powder product on the fresh concrete surface horizontally, instead of waterstop tape in immobile joints.

PERFORMANCE

Adhesion Strength by Pull-off: No traffic, Rigid ≥ 0.8 N/mm²

Water Vapor Permeability Class I; SD <5

Capillary Water Absorption and Water Permeability $w \leq 0.1$ kg/m². h^{0.5}

Waterproofing: Negative and Positive 7 Bar

Waterproofing: No Penetration ≤ 20 gr Mass Increase

Response to Fire: A1

These values are in laboratory conditions; It was obtained as a result of experiments carried out in $23 \pm 2^\circ\text{C}$ and $50\% \pm 5\%$ relative humidity environment. The values given in the table may differ depending on the surface and ambient conditions.

TECHNICAL SPECIFICATIONS:

($23 \pm 2^\circ\text{C}$ and $50 \pm 5\%$ relative humidity)

Appearance: Gray powder

Density: 1.20 kg/lit

Application temperature: (5) - (30 C°)

Temperature Resistance: (-30) - (70 C°)

Capillary Water Absorption and Water Permeability: $w \leq 0.1$ kg/(m².h^{0.5})

Adhesion Strength: ≥ 0.8 N/mm²

Water Vapor Permeability: Class I; SD <5m

Mixing Ratio: 25 Kg powder / 13-14 lt Water Spray, 25 Kg powder / 7-7,5 lt Water Brush

Consumption: 1-1.20 kg/m² (on each floor)

Pot Life: 20 min.

Time to become Waterproof: 7 Days

REFERENCE STANDARDS

Approvals/Standards EN 1504-2

SURFACE PREPARATION:

The surface must be cleared of residues that will prevent adhesion.

Gaps and deteriorated plasters on the application surface should be corrected with Bestkim repair mortar. Before starting the application, the surface should be moistened to the extent of water. The application surface should be protected from sun, rain and dust for 1 day and should not be applied under direct sunlight.

APPLICATION INSTRUCTIONS

25 kg of powder mortar should be poured slowly onto 13-14 liters of water and mixed thoroughly so that there are no lumps. It is recommended to mix with a low speed mixer. Any additive not specified in the application instructions should not be added.

The prepared grout-soaked mortar is applied to the concrete surface with a brush and spraying machine, layer by layer, with a total consumption of 2 kg/m². Each coat is applied in the direction perpendicular to the previous one, after the previous coat has hardened sufficiently, before it loses its water. After application, the surface should be kept wet for 7 days to accelerate crystallization and penetration.

EQUIPMENT CLEANING

After the application, the mortar on the used equipment should be cleaned with water before it dries.

PACKAGING

Powder: 20 kg kraft bag,

SHELF LIFE:

(Powder and liquid) 12 months in its unopened package in a dry environment.

STORAGE CONDITIONS

It should be stored in its unopened original package, in a dry (max. 60% relative humidity) and cool (temperature between 5°C and 25°C) environment. The mouth of the containers should be tightly closed when not in use. It should be stored in a dry environment with a maximum of 10 layers.

DISPOSAL

Empty packaging can be thrown into collection boxes according to local-local regulations or recycling rules. Dispose of the used waste material as construction waste after drying and hardening. It is dangerous to destroy product residues by burning.

SAFETY RECOMMENDATIONS/WARNINGS

Please refer to the Safety Data Sheet (SDS) for easy and safe application of the product. Do not breathe the dust as it is cement based. Do not contact eyes.

CERTIFICATE OF CONFORMITY