

SE mach3

Waterproofing



Highly flexible, two-component, quick-setting water-proofing stopper.

DECLARATION:

Liquid-applied water impermeable cement product, with the ability to bridge cracks at lower temperatures (-20°C), and resistant after contact with chlorinated water, type/class CMO2P according to EN 14891.

APPLICATION:

Hydraulically very quick-setting, water-proofing, crack-bridging stopper, intended for use beneath ceramic tiling. This product is suitable for the sealing of buildings in internal and external environments, such as external cellar walls, foundations, tanks, wall and floor areas in humid and wet areas of buildings. Specifically, this product is recommended for quick insulation of swimming pools, and for application in adverse climatic conditions in external environments.

Characteristic features:

- rapid and easy processibility, and excellent consistency
- fast curing – **final walking surface and possibility to tile after 4-6 hours** from the application of the last layer of waterproofing
- excellent adhesion to the base
- water-tightness for high-pressure water up to 50 m of water column
- **bridges cracks up to 2.5 mm**
- resistant to frost and ageing
- when using the **AD** series flexible adhesives, wall and floor tiles can be laid directly on the surface of the stopper
- safe for the environment

COMPOSITION:

Component **A** – water-soluble styrol-acrylate polymer dispersion. Component **B** – mineral filler, mixture of hydraulic binders, special fillers, and additives.

TECHNICAL PARAMETERS:

MANDATORY				
Watertight integrity	penetration of high-pressure water (150 kPa)	0 mm	Initial tensile adhesion strength	min. 0.5 MPa
	weight gain	max. 20 g	Tensile adhesion strength:	
Crack-bridging ability: - under standard conditions - at very low temperature (-20°C)		min. 0.75 mm	- after water contact	
			- after heat ageing	
			- after freeze/thaw cycles	
			- after contact with lime water	
			- after contact with chlorinated water	

INFORMATIVE	
Colour	grey
Mixing ratio of components (by weight)	1 : 1 = dry (A) : liquid (B)
Pot life (at 23°C)	approx. 45 min
Maximum thickness of one layer	1.5 mm
Unit usage – at layer of 1 mm	approx. 1.25 kg/m ²
Number of required layers	min. 2
Curing period of 1 layer (approx. 1 mm)	2-4 hours
Final walking surface (at 23°C and 50% air relative humidity)	after 4-6 hours

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TECHNICKÝ LIST /

INFORMATIVE	
Permanent load with water	after approx. 3 days
Tensile strength	min. 1.0 MPa
Relative elongation	min. 50%
Water impermeability – penetration of high-pressure water (500 kPa)	0 mm (valid for positive pressure)

NOTE: The technical parameters are determined under standard conditions (23 ± 2)°C and (50 ± 5)% of relative air humidity.

BASE PREPARATION:

The base must be solid, clean, free of loose particles, and slightly wet. Water-resistant residues (such as release lubes, fats, and paints) must be removed. All surfaces from concrete and cohesive masonry are suitable, as well as plaster surfaces, min. category of CII inside buildings), and min. category of CIII in external environments.

Depending on the suction capacity of bases, all common bases are penetrated with the **PE 201** or **PE 202** penetration coating.

The **CP 203** contact bridge should be applied on smooth, non-absorbent mineral bases (glazed or vitrified ceramics, polished stone, mechanically polished concrete, etc.), wood particleboards or OSB boards, and bitumen bases.

For high-pressure water, concrete with a minimum penetration depth should be used.

Base surface irregularities and defects (cracks, cavities, potted surfaces, open air caverns in concrete, etc.) must be repaired locally, or on the entire surface with suitable materials, screed, levelling or reprofiling mortar (such as **LE 10**, **MO 35 QUICK**, **MO 50**, **OV 30**, **OV 30 SPEED**, and **OV 40**), which must be fully cured before application of waterproofing.

PROCESSING:

Insulation should be performed in at least two layers (more layers are acceptable). The minimum total thickness of the stopper layer at every place must correspond to the expected water load (see the Table).

Mixing procedure:

The integrated 20 kg package contains two 5 kg bags with dry component, and two 5 kg bags with liquid dispersion (10 bag package contains 5 kg bag with dry component, and 5 kg bag with liquid dispersion). This makes it easy to prepare components always in a ratio of 1: 1 parts by weight. Stir the mixture for approx. 2-3 minutes to create a homogeneous, creamy material with excellent brushability and zero run of this product.

Application:

The waterproofing is applied with spatulas, applying the uniform layer while not exceeding the thickness of 1.5 mm – ensuring stress-free drying of insulation in every layer. The next layer should be applied only if the previous layer is cured and dried.

To seal corners and expansion joints, the **SE 5** sealing tapes are to be inserted into the freshly applied first layer of the waterproofing stopper. Inner and outer corners are sealed with profiles formed from the **SE 5** tape. During this process, the product usage is about 300 g/running metre. A subsequent overlap with a stopper layer will ensure a high quality compact insulation of the critical parts of building structures.

Tiling:

The laying work of ceramics can be started with the recommended **AD** series adhesives already after 4 hours, and, in the case of adverse climatic conditions, not later than after 24 hours.

Stopper usage according to the surface load with water		
Load group	Lowest possible layer thickness [mm]	Usage of mass [kg/m ²]
Soil moisture	2	2.5
Non-pressure water	2	2.5
High-pressure water (lower than 3 m of immersion)	2.5	3.1
Water reservoirs with a water depth of up to 50 m	3	3.7

CAUTION:

- For continuous sheet waterproofing, the basic provisions according to ČSN P 73 0606 should be followed.
- For design of waterproofing of buildings, ČSN P 73 0600 should be followed.
- Passivation of metallic elements should be carried out before application of this product. Contact with metals can result in corrosion, and subsequent damage to waterproofing.
- Related civil engineering structures should be carefully covered and protected from splashes.
- This product should not be processed in direct sunlight, rain, or high air humidity.
- It is inadmissible to add additional binders, fillers, and other additives.
- The material can be processed only under air and base temperature ranging from +5°C to +30°C! Lower temperatures and higher relative humidity prolong the time of drying and load-bearing capacity! Do not apply if frost conditions are expected!
- No warranty is accepted for permanent overlay of construction and technical cracks exposed to extreme movements!

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- Disposal of component A: Leave the unused residues to air harden (dry), and dispose of them, together with contaminated containers, in a controlled landfill (see the Safety Data Sheet).
- Disposal of component B: Unused residues should be mixed with water and allow them to harden - they can be disposed of as construction wastes; contaminated containers should be disposed of as hazardous wastes (see the Safety Data Sheet).
- Product disposal: Leave the unused residues to harden - they can be disposed of as construction wastes.
- Only completely emptied and clean packaging may be handed over to recycling.

FIRST AID, SAFETY AND HYGIENE REGULATIONS:

See the product Safety Data Sheet.

STORAGE:

Store the product protected from frost at a temperature ranging from +5°C to +30°C. The minimum storage time is 12 months, if the product is stored in the originally closed containers. The expiration date is specified on the packaging.

SHIPPING:

The product is supplied in the 20 kg (or 10 kg) plastic packaging. The integrated package contains two 5 kg bags of liquid dispersion, and two 5 kg bags of dry component (or one 5 kg bag of liquid dispersion, and one 5 kg bag of dry component).

QUALITY:

- The product quality is regularly checked in the manufacturer's laboratories.
- The production control system is used in manufacture, and a certified quality management system, according to ISO 9001, is applied.
- Continuous surveillance and proving the conformity of products (if necessary) is ensured by TZÚS Prague, OS 1020.

DISTRIBUTOR:

LASSELSBERGER, s.r.o., Adelova 2549/1, 320 00 Pilsen – Jižní Předměstí

VALIDITY:

Since 1 March 2015

We reserve the right to make any changes that are the result of technical progress. This issue cancels and supersedes all previous issues.