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## MEGATRON SUTURE

**Seamless mineral composition used for sealing cold joints, cracks, and junctions in building structures**

### Material description:

"Megatron Suture" is a material used for sealing seams, cracks, and joints in building constructions.

The suture composition includes modified Portland cement, carefully selected quartz filler, and chemical additives.

"Megatron Suture" exhibits high bonding strength with the substrate, high waterproofing, chemical, and corrosion resistance.

It is used for waterproofing static structures made of monolithic concrete and prefabricated reinforced concrete.

### Advantages of "Megatron Suture":

- High bonding strength: "Megatron Suture" possesses high bonding strength with the substrate, ensuring reliable adhesion to the surface, providing high moisture protection efficiency.

- Wide range of applications: "Megatron Suture" can be applied to various types of concrete structures (cement screeds and plasters, foundation walls, foundation slabs).

- Waterproofing: "Megatron Suture" has high waterproofing properties, making it effective in preventing water and moisture penetration into the structure.

- Ease of use: It is applied exclusively to a wet surface (does not require surface drying) from any accessible side of the structure. No additional protection is required.

- Chemical and corrosion resistance: "Megatron Suture" possesses properties that allow it to withstand the influence of chemicals and avoid corrosion from seawater and groundwater.

- "Megatron Suture" does not contain harmful substances and does not harm the environment, approved for use in drinking water tanks.

### Applications:

- Waterproofing prefabricated concrete structures (foundation blocks, floor panels, balcony slabs, etc.).

- Waterproofing monolithic concrete structures (foundation slabs, cement-based screeds, columns, staircases, etc.).

- Waterproofing industrial structures (foundation slabs, columns, wall panels, etc.).

- Waterproofing agricultural structures (silos, bunkers, gas holders, underground and aboveground galleries, etc.).

- Waterproofing water management structures (pipelines, reservoirs, wells, boreholes, etc.).

- Waterproofing mining facilities.

- Waterproofing sewage treatment facilities (septic tanks, settling tanks, etc.).

### Application recommendations:

"Megatron Suture" should be applied according to the manufacturer's technological regulations.

Before applying "Megatron Suture," surface preparation is necessary to ensure the best bonding and penetration quality.

Grooving is performed along the entire length of the crack using a hammer, mill, or other mechanical means. The cross-section should be at least 25x25 mm to ensure the necessary strength and water resistance. For sufficiently large grooves, the material is applied in layers of no more than 30 mm.

The material is manually applied to the pre-moistened void of the seam, crack, or groove or using a spatula. Additionally, for closing large cracks to save material, the addition of fine washed gravel (5-10 mm) in an amount of 25-30% by volume is allowed. It is recommended to additionally treat the filled groove with "Megatron Penetrating." It is important to note that with an increase in the cross-section of the groove or crack, the material consumption increases.

The dry mixture should be mixed with water in a ratio of 1 kg of mixture to 200 g of water (or in a ratio of 5:1, where five parts of the dry mixture to one part of water by volume).

The amount of water may depend on the temperature and humidity of the surrounding environment. Water is poured into the dry mixture

in small portions and manually or mechanically mixed for 1-2 minutes.

The mixture will acquire a consistency of clay. Prepare only as much solution as can be used within 15-30 minutes.

During use, the material should be regularly stirred. Additional water addition is not allowed.

The application work should be carried out at a temperature not lower than +5°C.

**Attention!** Pressurized leaks should be sealed with Megatron Sealant.

### Technical Specifications:

Characteristics	Value
Appearance	Powdery dark-gray powder, free from impurities
Moisture content, % by weight	0,5÷0,7
Setting time, min	
Start	20÷35
End	35-60
Bulk density in uncompressed state, g/cm <sup>3</sup>	1,35
Adhesion to concrete, MPa	2÷3
Compressive strength, MPa	
7 days	18-20
28 days	25-27
Waterproof grade, W	12÷16
Frost resistance, number of cycles, F	250-300
UV Resistance	Not affected
Application temperature, °C	+5
Operating temperature, °C	-60 ÷ +130
Shelf life, months	12

### Material Consumption:

The consumption of "Megatron Suture" material is 1.7 kg/linear meter for a groove of 25 x 25 mm.

### Storage:

The guaranteed shelf life is 12 months at temperatures from -20 to +60°C in undamaged factory packaging.

### Safety Measures:

During the use of "Megatron Suture," it is necessary to adhere to the following safety measures:

- Ensure workplace safety. Make sure the workplace is clean, empty, and free from hazardous materials. Install barriers and safety signs where necessary.

- Use appropriate eye and respiratory protection. Dust and other substances may be released during waterproofing, posing a health risk. Use protective goggles and respirators.

- Use safe tools and equipment. Ensure that the tools and equipment you use are safe for work. Check them before use.

- When working with waterproofing, follow safety rules for working with liquids and chemicals.

- Follow all safety requirements established by relevant organizations and manufacturers.

- Ensure that the materials you use are environmentally safe and do not have a negative impact on the environment.