INJEKTOSTONE H

Cement-bentonite dry mix for injection

1. Product characteristics

INJEKTOSTONE H is a dry single-component cement-bentonite mix intended for reinforcing injections.

- mixed with water only
- contains agents compensating the volume changes
- optimum consistency for processing
- high penetration ability
- provides enhanced hardness to the injected layers
- enhanced resistance to ground sulfuric water

2. Use

INJEKTOSTONE H is used as a reinforcing injection of permeable and water-soaked gravel and rock layers situated behind the back of the sewerage pipe lining. It reinforces the surroundings of the sewerage pipeline, tunnels, main services ducts, arches, etc.
INJEKTOSTONE H easily penetrates even finer pores and cracks. Its qualities include a long open time with fast subsequent setting. The expanding bentonite components provide for perfect sealing of the injected layers against water penetration and the rock surroundings is also reinforced.

3. Physical and mechanical parameters

Tensile bending strength (MPa)	7 days 28 days	>1.5 > 3.0
Compressive strength (MPa)	7 days 28 days	> 5 > 10
Sulfuric water resistance		permanently resistant to environment up to 2000 mg SO_4^{2-}/l

4. Test certificates

The product is certified according to Act No. 22/1997 Coll. and Governmental Decree No. 163/2002 Coll. Continuous independent production quality control is provided by AZL 1687 LABBET®. Supervision of quality management, environmental and OSH systems is performed by Certification Body No. 3029.

5. Instruction for preparation and application

Preparation of the injection mix means only mixing the dry component with water in ratio specified in the following table:

INJEKTOSTONE H	dry component (kg)	water (liters)
	25	5.8 ÷ 6.8

Workability of the product is 50 - 60 minutes under 20°C.
Neither temperature of base nor temperature of ambient air shall be below + 5°C and above + 30°C.
Application of the mix. **INJEKTOSTONE H**was primarily developed to reinforce, seal and consolidate sewerage piping buried in permeable soil, permeable and water soaked gravel and rock layers and to seal and consolidate lining of tunnels, main services ducts, arches, viaducts, etc. Working requires adequate machine equipment, especially a pan concrete mixer, activation mixer and a sufficient pressure pump. The specific working depends on the machine equipment used. When working the mix for injection, be sure to observe the open time, upon its expiry the setting mix must not be diluted with water.

6. Specific consumption

Specific consumption of dry mortar amounts to 1.6 ÷ 1.7 kg/dm^3 of the filled up volume.

7. Packing and storage

The product is supplied in PE lined paper bags of 25 kg. **INJEKTOSTONE H** must be efficiently protected against moister during storing and transportation.
The shelf life of the product in original undamaged packing is 6 months.
After the expiration of min. shelf life, which is stated on the packaging, ingredients are not fully effective at reducing chromium VI below 2 ppm.

8. Health protection at work

Handling the **INJEKTOSTONE H** dry mortar mix does not require any extraordinary hygienic precautions. The product contains alkalis and therefore any contamination of mainly eyes or mucous membrane must be prevented. Health and labor safety rules applicable to work with cement or lime mortars are to be adhered to.

Issued MSDS meets the requirements of EC-Regulation 1907/2006, Article 31.
Because the product meets the criteria for classification as hazardous, it is necessary to provide the recipient or carriers with MSDS.
In countries where regulation REACH (par. 33.1): EU regulation on chemicals and their safe use (REACH: EC 1907/2006) is valid, professional users and distributors must be provided with following information automatically and without request:
This product is subject to Regulation (EC) no. 1907/2006 (REACH). It does not contain any substances that could be released from product under normal or reasonably foreseeable conditions of use. Therefore, there are no registration requirements for substances in articles within the meaning of. Article 7.1 of the Regulation.
Based on our current knowledge, this product does not contain SVHC (substances of very high concern) from candidate list published by the European Chemicals Agency in concentrations above 0.1% (w / w).

9. Waste disposal

During disposal of contaminated packages or clearing debris from product, it is necessary to follow the Act No. 185/2001 Coll. on waste, as amended.

10. Important notice

All information mentioned above, especially advice for processing and application of our products is based on our knowledge from the development of chemical products and on years of experience with applications in practice at standard conditions, and proper storage and use. Due to the differing conditions during processing, high count of products, varying nature and modifications of base and other external influences, the procedure based on the information provided or on other written or oral recommendations, may not always ensure satisfactory working results. BETOSAN s.r.o. assumes no liability for provided advice or recommendation. The applicator must prove, that he submitted complete information on time and in writing which is necessary for a proper detailed assessment by BETOSAN s.r.o. The applicator must test the suitability of the products for the intended application. Proprietary rights of third parties, above all, must be taken into account. All received are orders subject to our current "General sales and delivery conditions ". Please always make sure that you follow the most recent issue of the Technical Data Sheet. It is available, along with other information, at our Technical Department or at www.betosan.cz

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SPECIAL MORTAR MATERIALS

BETOSAN s.r.o., Na Dolinách 28, 147 00 Praha, Czech Republic
Bussiness and technical office Nová cesta 291/40, 140 00 Prague 4, Czech Republic
Tel./fax.:+420 241 431 212, tel.:+420 241 431 215
E-mail: praha@betosan.cz, www.betosan.cz

Vědeckotechnická společnost pro sanace staveb a péči o památky