

FLEXIBLE POLYURETHANE INJECTION SYSTEM FOR RAPID WATER STOPPING

DESCRIPTION

PENETRON® INJECTION FOAM (F) is a rapid foaming, solvent free, water reactive polyurethane injection foam system. When reacted with a catalyst it forms a dense, flexible, fine cellular foam to temporarily stop water leakage.

RECOMMENDED FOR

PENETRON® INJECTION FOAM (F) is recommended to stop water penetration from cracks, voids and joints in concrete structures, brickwork, and natural and artificial stonework. To achieve permanent sealing PENETRON® INJECTION RESIN should be injected subsequently. Typical areas of application are:

- ▶ Tunnels
- ▶ Basements
- ▶ Diaphragm walls
- ▶ Manholes
- ▶ Reservoirs
- ▶ Water tanks
- ▶ Pools
- ▶ Soil Stabilization

ADVANTAGES

- ▶ Long pot life when mixed component is kept in closed condition.
- ▶ Unconfined expansion volume is more than 15 times.
- ▶ Reacts only in contact with water and humidity.
- ▶ Excellent bonding to wet surfaces.

TECHNICAL CHARACTERISTICS

Typical properties at 21°C (70°F)

	Part A - Base	Part B – Catalyst
Color	Brown	Colorless, water white
Form	Liquid	Liquid
Density	1.16 kg/L	0.99 kg/L
Viscosity	100 – 400 cP	25 - 100 cP

Properties at standard mix ratio of A : B = 20 : 3,4 by weight of resin to catalyst [5 : 1 by volume at 20°C (68°F)]:

Foam start time	5 seconds
Foam end time	20 seconds
Max volume expansion	15 - 20 times (unconfined)
Pot life (when not in contact with water)	> 2 hours in closed condition
Application temperature	5 to 40° C (41 to 104°F)

All data are average values obtained under laboratory conditions. Impractical use, temperature, humidity and absorption of the substrate may influence the above given values.

DIRECTIONS FOR USE

Application tools: Use single compartment injection pump.

Wet conditions: Using the standard given ratio, measure out the required amounts of Part B (Catalyst) and Part A (Base). Under mixing, add Catalyst to Base to form PENETRON® INJECTION FOAM (F) and mix thoroughly. Use only required quantity of this mixture for injection through single-component pump.

FLEXIBLE POLYURETHANE INJECTION SYSTEM FOR RAPID WATER STOPPING

Dry conditions: After installing packers, flush the cracks with water thoroughly to wet the injection area. Using the standard given ratio, measure out the required amounts of Part B (Catalyst) and Part A (Base). Under mixing, add Catalyst to Base to form PENETRON® INJECTION FOAM (F) and mix thoroughly. Use only required quantity of this mixture for injection through single-component pump.

Note: Foam reaction and expansion volume depends upon velocity of water, surrounding temperature, material temperature, pressure and flow rate. For permanent sealing, use PENETRON® INJECTION RESIN.

SPECIAL CONSIDERATIONS

Once injection work is completed, immediately flush the pump and hose line with PENETRON® PUMP FLUSH.

Contact PENETRON HELLAS S.A. for additional information, regarding your project.

PACKAGING

Part A Base: 19 L (5 gal) pails

Part B Catalyst: 3,8 L (1 gal) jugs

STORAGE / SHELF LIFE

PENETRON® INJECTION FOAM (F) must be stored in a dry enclosed area off the ground at a minimum temperature of 7°C (45°F). Shelf life when stored in proper conditions in unopened, undamaged packaging is 12 months.

SAFE HANDLING INFORMATION

KEEP OUT OF REACH OF CHILDREN. For further information please refer to Safety Data Sheet. PENETRON HELLAS S.A. has recently updated Safety Data Sheet on the safe use of PENETRON® products. Each Safety Data Sheet contains health and safety information for the protection of your employees and your customers.

WARRANTY - DISCLAIMER

PENETRON HELLAS S.A. warrants that its products are manufactured under certified ISO Standard procedures, are of excellent quality and shall be free from material defects and contain all components in their proper proportion. Should any of the products be proven defective, the liability to PENETRON HELLAS S.A. shall be limited to replacement of the material proven to be defective, since the standard application procedures have been met and the suitability of the product for the particular application have been proven. PENETRON HELLAS S.A. makes no warranty as to merchantability of fitness for a particular purpose. User, after contacting the distributor of the product, shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith. While every care has been taken, the information provided in this product's data sheet make no part of any contract. All recommendations, technical data and test data contained in this product's data sheet are based upon the results of control laboratory tests or in actual field tests. However, PENETRON HELLAS S.A. makes no warranty of any kind, concerning this data. In any case, this data is given in good faith based in the PENETRON HELLAS S.A. experience, till the publication of this sheet. Due to variance in storage, handling and applications of the materials, PENETRON HELLAS S.A. accepts no liability for the results obtained. It is suggested that potential users try small applications to determine the suitability of each individual product for their specific requirements. The users should always refer to the most recent edition of the product's data sheet. PENETRON HELLAS S.A. may particularly differentiate its versions of the product's data sheet compared with those of PENETRON INTERNATIONAL LTD or respective PENETRON companies worldwide. These changes are due to text formatting, different application weathering and procedures or different product names and aim at the optimal consumer information.