

# **STOPWATER 200**

# ONE-COMPONENT FLEXIBLE POLYURETHANE INJECTION RESIN FOR STOPPING WATER LEAKS

#### **DESCRIPTION**

Stopwater 200 is one- component, polyurethane injection resin which reacts with water to produce a waterproofing flexible foam which expands up to 8 times its original volume. It does not need any catalyst and is supplied as a single component resin.

Stopwater 200 is a high quality, hydrophilic injection material which is very effective for leaks in underground structures.

#### **APPLICATION FIELDS**

- Water cut-off, sealing and filling of cracks and fissures into wet substrates or subjected to high hydrostatic pressure conditions with running water leaks for:
- Damaged, cracked or honeycombed concrete.
- Stone or brick masonry.
- Below grade structures: tunnels, galleries, basements, retaining walls, foundations, etc.
- Pipe network and retaining structures of drinking water: dams, water tanks, channels, swimming pools, reservoirs, etc.
- Sewer system: sewers, manholes, utility boxes, waste water tanks, etc.
- Sealing and filling of construction or expansion joints in concrete structures.
- Plugging of running water leaks.
- Filling of large cavernous spaces, voids and cracks in stone substrates or concrete structures.
- Consolidation and stabilization of soils.

# **ADVANTAGES**

- Easy to use: No on-site mixing is necessary therefore making it very convenient to work with.
- Excellent performance in high water leak areas with a quick reaction time.
- The material has a long pot-life so it doesn't damage the machine and does not require regular cleaning.

- Hydrophphilic system: reacts with the flowing water or humidity present in the substrate. No water injection is required.
- Flexible foam: once cured it withstands substrate movements.
- Low viscosity: ensures good and deep penetration into the substrate during the injection process.
- High expanding ratio, up to 8 times its original volume when exposed to moisture.
- High chemical stability with long lasting and high mechanical strengths.
- Withstands high hydrostatic pressure.

#### **APPLICATION INSTRUCTIONS**

For additional information, consult the Technical Dossier .

# **APPLICATION**

Resin injection: Since Stopwater 200 Reacts with the water in the substrate to be injected, the system is suitable for one component injection equipment. Hydrophilic resins such as Stopwater 200 are suitable for permanent immersion applications, so a simultaneous injection of water is not necessary. Only if the area of application seems to be dry, pre-injection of water is recommended.

It is essential to keep the equipment absolutely dry. Prevent any moisture from coming into contact with the mixture in order to avoid a premature reaction of the product. If the reaction of the batch occurs while pumping, the injection machine must be immediately shut down and flushed with solvent in order to avoid the machine from clogging.



The basic steps for injection are as follows:

- 1. Clean the substrate or concrete surface along the joint, crack or fissure.
- 2. Plan a pattern of the injection points and then, dril holes.
- 3. Clear the injection holes
- 4. Set the injection packers.
- 5. Clear and seal the joints or cracks with a fast-set repair mortar
- 6. Inject the polyurethane-based resin Stopwater 200
- 7. Clean the surface, tools, mixing equipment and injection equipment of resin.

#### **APPLICATION CONDITIONS**

Both temperature and humidity of the environment must be observed because they will determine the pot life of the material. The higher temperature and relative humidity, the shorter the induction time will be.

### **CLEANING AND MAINTENANCE OF EQUIPMENT**

Mixing equipment and injection pumps are to be cleaned with a suitable solvent immediately after use or if works are interrupted for a long period. Once the product cures it can only be removed by mechanical means. Circulate the cleaner through the pump for several minutes. It is recommended to circulate mineral oil after the cleaner in order to displace the solvent.

#### **CONSUMPTION**

Consumption varies according with the use. A preliminary test on-site will determine the coverage exactly.

# **IMPORTANT INDICATIONS**

• Inject the resin when cracks and fissures are in the maximum width of their movement cycle.

# **STOPWATER 200**

- Observe the safety precautions during both the handling and the resin injection process.
- Avoid premature contact of resin with water before injection in order to avoid any reaction of the product.
- For further information and other uses not specified in this Technical Bulletin consult our Technical Department.

#### **PACKAGING**

Stopwater 200 is supplied in 10 kg & 200 Kg drums.

#### **ACCESSORIES**

Injection equipment consisting of electric pumps and injection packers are available.

#### **STORAGE**

Six months to One year in its original unopened containers In a dry and covered place, protected from humidity, direct sunlight and frost, at temperatures between 5 °C to 35 °C.

#### SAFETY AND HEALTH

During the mixing and injection do not work without protection of safety rubber gloves, safety clothing, safety goggles and full face shields permanently. Spil s and blow outs may happen due to the pump pressure. In case of skin contact, wash with abundant water and soap. If one of the components or mixture comes in contact with the eyes, rinse immediately with clean water but do not rub. If irritation persists, seek medical assistance. If ingested, seek immediate medical assistance. Do not induce vomiting. Provide suitable ventilation in the working area.

Observe the usual precautions necessary for the use and applications of this type of products. For further information, Safety Data Sheet fof Stopwater 200 is available by request.

Disposal of the product and its empty packaging must be made by the final user and according to official regulations.



# **TECHNICAL DATA**

Characteristics of components			
Appearance	Viscous liquid		
Colour	Yellow		
Density at 20 °C, DIN 53 217/1-2 (g/cm³)	1,10 ± 0,1		
Flash point (°C)	> 180		
Application and curing conditions	15°C	25°C	30°C
Induction time (s)	27	16	13
Total reaction (s)	165	126	105
Cured product characteristics*			
Expansion ratio	800%		
Shrinkage	None		
Toxicity	No-toxic for cured form: solvent-free product		
Solubility in water	None		
Chemical resistance	Resistant to most organic solvents, diluted acids and alkalis and micro organisms		

<sup>\*</sup> Data at 20 °C and 50% R.H.

# **GUARANTEE**

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