

it's
magic

Liquid Repair
System ER7



Basilisk
self healing concrete



Basilisk Liquid Repair System ER7

Basilisk Repair System ER7 is a 2-component low viscosity color- and virtually odorless organic solvent-free solution. It contains natural enzymes, organic- and inorganic salts and is specifically developed for permanent sealing and waterproofing of cracks (up to 0.8 mm wide) in concrete constructions. The 1st component penetrates deep into cracks and pores, while application of the 2nd component results in gel formation sealing cracks and pores, and furthermore contributes to curing of the concrete surface.

Both components of Basilisk Repair System ER7 are delivered in form of powder mixtures which must be dissolved in lukewarm water immediately before application.

Advantages in Application

- Organic solvent free
- Colorless
- Permanently seals cracks up to 0.2 mm (1 treatment) up to 0.8 mm width (2-3 treatments)
- Densifies porous surfaces
- Penetrates deep into cracks and pores
- Prevents chloride attack and delays reinforcement corrosion
- Increases frost damage resistance
- Rapid application allowing fast accessibility of construction

Application areas

Particularly suitable for repair of concrete constructions suffering from drying- and shrinkage cracking and wear. Can be applied on porous surfaces or directly into cracks. Type, position, amount, and size of cracks must be inspected and established by expert concrete repair personnel prior to repair in order to ensure proper and functional application of Basilisk ER7. Understanding of cause of crack formation, early wear, possible reoccurrence and its consequences for functional performance and durability aspects of concrete constructions requires inspection by trained workers.

Application

Inspection of application area by a Basilisk certified concrete repair technologists is required prior to application of Basilisk Liquid Repair System ER7.

Powder mixtures of both components must be dissolved separately in specified aliquots of lukewarm water directly before application. Both liquid solutions must be transferred separately in (handheld) pressurized spray units. The first component 'A' must be applied in amounts sufficient to saturate occurring cracks and pores, while the second component 'B' must be applied sequentially (within 5 to 30 minutes after application of component 'A'). Application of component 'B' results in formation of a firm gel, covering and sealing cracks and pores, as soon as brought into contact with component 'A'. Cracks and pores of to be treated concrete surfaces must be clean and dry prior to treatment to allow effective penetration of the liquid repair system. Typical application volume of component 'A' is 0.5L / m² and application ratio of component 'A' to 'B' is 4:1 but both may vary depending on present crack- and pore number and volume.

Permanent sealing of pores and cracks up to 0.2 mm cracks requires a single treatment while larger cracks (up to 0.8 mm wide) requires 2 to 3 sequential treatments interrupted by minimally 6 weeks periods.

Used spray units must directly after use be emptied and thoroughly rinsed with lukewarm water to allow re-use of sprayers.

Waste disposal

Excess and left over aliquots of both component 'A' and 'B' solutions can be mixed (beware of gel formation) prior to discarding. Waste must be labelled as 'alkaline- organic salt-containing, organic solvent free, water-based solution' and discarded according to national waste treatment regulations.

Storage conditions

Containers holding mixed powders of both component 'A' and 'B': between 0°C and + 40°C. Containers must be sealed and protected against moisture. Shelf life of sealed containers: 12 months
Penetration depth solution 'A': Class II \geq 10 mm
Water absorption
Reaction time: Ca. 3 weeks (depending on In Situ temperature)

Product characteristics

Description: Powder mixtures components 'A' and 'B'
Low viscosity, colorless liquid solution, organic solvent-free
Solid powder content after dissolution: 0- 2"%
Odour: mild yeast extract
Volume - weight ratio (kg/l) : 1,1
Boiling point solutions 'A' and 'B': 100 °C
Freezing point solutions 'A' and 'B': 0 °C
Flashpoint: Nonflammable
Storage conditions: Between 0°C and + 40°C
Viscosity solution 'A': 1,1 mPa.s
Viscosity solution 'B': 1,1 mPa.s
Viscosity after mixing solutions 'A' and 'B': Increasing to ca. 1000 mPa.s
Shelf life powders mixtures in sealed containers: 12 months

Packaging

Available in sealed containers:
Powder mixture component 'A': 0.9 kg and 9 kg for respectively 5 L and 50 L solutions
Powder mixture component 'B': 1.25 kg and 12.5 kg for respectively 2.5 L and 25 L solutions

Health and environmental aspects

R 38 - Irritating for bare skin
S 24 - Avoid direct skin contact
Safety: Nonflammable / nonexplosive