# it's **magic** Self Healing Agent for Concrete Mixtures





# **Basilisk Self Healing** Agent for Concrete Mixtures 2 8

# **Basilisk Concrete Self Healing Agent**

Since Roman times men build constructions using concrete as an all-round building material. While ordinary concrete can handle substantial compressive loads, tensile and flexural load carrying capacity is however limited. Even when reinforced with steel rebars. concrete is sensitive to crack formation. Cracking can result in a number of problems such as water leakage, frost damage and reinforcement corrosion. These detrimental phenomena shorten the functional service. lifetime of concrete constructions substantially and require therefore costly maintenance and repair actions. For difficult to reach constructions manual inspection and repair is however often not possible or otherwise even more expensive. A solution to avoid costly maintenance and repair actions is provided by self-healing concrete.

In 2010 the Delft University of Technology invented self-healing concrete: concrete of the future. After founding the company Green-Basilisk in 2014, self-healing concrete became available for the market. From now on concrete is able to self-repair cracks, making constructions more durable thereby increasing its service lifetime while reducing maintenance and repair costs. Basilisk Self Healing Concrete is a true innovation as its patented bio-based technology is recognized by the European Patent Office by nominating it for the 2015 European Inventor Award.

In short, Basilisk Self Healing Concrete will make constructions last longer, while at the same time reducing costly maintenance and repair. The choice for owners who consider construction life cycle costs.

#### **Characteristics**

Basilisk Self Healing Agent is applied in special repair mortars and concrete mixtures. It is composed of a biodegradable granular additive (healing agent) what autonomously seals and waterproofs up to 1-mm wide occurring cracks. Permanent sealing occurs due to concrete compatible limestone formation. Compatible with commercial concrete mixtures. Contains a biodegradable polymeric mineral precursor compound and a bio-based enzymatic catalyst.

# **Typical applications**

- Tunnel elements
- Liquid-containing reservoirs
- Basement walls
- Subsurface constructions
- Marine constructions
- Bridge- and parking decks
- Flooring systems

# **Tailor made solutions**

One of our Basilisk technical specialist will support your company to design your concrete self-healing mix. It is tailor made special for your project. In general between 5 and 15 kg healing agent per m3 concrete mix is required, depending on environmental conditions of application. Healing Agent can be applied in ready mixes, prefab applications, or added directly to the truck mixer on site.

Health and environmental aspects Safety Non-flammable / nonexplosive





Basilisk-Contracting BV Rotterdamseweg 183 C 2629 HD Delft Tel: +31 15 268 2657 For more information on Basilisk products: info@basiliskconcrete.nl www.basiliskconcrete.com