

CON/CRYSTAL

Crystalline, Capillar Waterproofing Chemical Concrete Admixture



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PRODUCT DESCRIPTION

INKA-CON/CRYSTAL, is a continuously active structural waterproofing admixture with crystalline effect, used for blocking capillar voids by specialty chemicals contained in its composition.

ADVANTAGES

- makes concrete impervious against positive and negative high water pressure (up to 14 bars depending on the concrete class)
- closes cracks up to 0,4 mm with its crystalline effect following the curing of concrete
- stays continuously active becoming a part of concrete
- will not aggregate during the mixing process thanks to its liquid form
- does not have a negative effect on the setting times of fresh concrete
- does not have an effect on the ultimate properties of concrete and hardened concrete will continue to breathe
- eliminates the need for additional waterproofing applications
- thanks to the homogeneous distribution of the product, there is no need to take additional measures to protect the insulation
- can be safely used in reinforced concrete potable water reservoirs
- gives perfect results when used in spread foundations
- easy to use (by simply adding into the fresh concrete mix)
- saves substantially from waterproofing application labor costs
- does not harm the environment

AREAS OF USE

- in foundations of bored piles,
- in foundations and reinforced concrete shear walls,
- in concrete shear walls of underground car parks,
- in concrete tunnels, dams,
- in concrete lift shafts,
- in manufacturing precast concrete elements,
- in foundations and reinforced concrete shear walls of potable water reservoirs and waste water reservoirs,
- in foundations and reinforced concrete shear walls of waste water treatment plants,
- in foundations and reinforced concrete shear walls of swimming pools,
- in manufacturing aqueducts,
- and in mass concrete for continuously active waterproofing.

TECHNICAL DATA

- **Appearance:** Transparent liquid
- **Density (@20°C)** ~ 1,15 kg/t
- **pH:** ~ 11,5
- **Application temperature:** between 8°C and 30°C
- **Storage:** 12 months when kept closed in its original packaging away from direct sunlight.
- **Ambalaj:** 30 kg PE pails, 200 kg PE drums, 1150 kg IBC tanks

DOSAGE

Maximum dosage is 3% of the weight of the binder.
Minimum dosage is 6 kg's per m³

The recommended dosages are shown below according to the water/binder ratio:

w/b 0,45 = 2% of the binder

w/b inbetween 0,45 - 0,50 = 2,5% of the binder

w/b inbetween 0,50 - 0,55 = 3% of the binder

INKA-CON/CRYSTAL, should not be used when water/binder ratio is greater then 0,55.

APPLICATION

INKA-CON/CRYSTAL can be added into the mixing water of the fresh mix as the last component OR it can be added separately into the transmixer before discharge;

When added into the transmixer directly: in order to achieve a homogeneous distribution, **CON/CRYSTAL** should first be mixed with water and then added to the transmixer, allowing an adequate mixing time of 10 - 15 minutes.

When added at a concrete plant: 70% of the mixing water should be added into the mix first. The rest of the mixing water together with **CON/CRYSTAL** should then be added into the mix to achieve the best result. (min. mixing time is 10 mins.)

When used in precast concrete: **CON/CRYSTAL** should be added into the mixing water of the fresh mix as the last component followed by a mixing time of min.10 minutes.

Depending on the concrete class and amount of mixing water, the amount of **CON/CRYSTAL** used should be deducted from the total amount of water used inside the mix. In other words, the total amount of mixing water should be calculated together with the amount of **CON/CRYSTAL**.

ATTENTION

- **INKA-CON/CRYSTAL**, is not suitable for use as a crystalline waterproofing agent when water/binder ratio is greater then 0,55.
- Dosing equipment should be periodically cleaned as the chemical composition of the product may cause clogging due to crystallization.
- When used combined with other admixtures, **CON/CRYSTAL** should be added into the mix as the last component and adequate mixing periods as indicated in the APPLICATION section should be strictly followed in order to achieve the best effect.

HEALTH & SAFETY

- Does not contain harmful chemicals but it is recommended to wear protective gloves, goggles and clothing during application.
- Wash skin and eyes with plenty of water if contact occurs and seek medical attention if necessary.

TECHNICAL SERVICES

Our technical support team is ready to answer all your questions concerning our product line.

For additional information, please contact our headquarters.

Material Safety Data Sheet of this product can be obtained from info@inka.com or from our regional sales representatives.