



NATURCEM®



NATURCEM® Positive surface deactivator

NATURCEM® is a positive surface deactivator for water-based concrete. It delays the hydration of cement on the exposed concrete surface. After cleaning of the treated surface, the concrete aggregate is exposed. Biodegradable.

Properties

- Particularly recommended for the production of decorative flooring after controlled deactivation of concrete curing.
- Solvent-free, which facilitates its use.
- It is not necessary to protect any surrounding area, except for painted facades and porous surfaces.
- The spray equipment can be rinsed with water.

Fields of application:

- Street furniture.
- Aggregate surfacing.
- Road barriers with aggregates.

Preparation

Water-based product, no dilution required. Ready to use. Shake before use.

Consumption

Applied on concrete:

- 5 - 6 m²/L

Technical data

- Appearance: Blue liquid, peach liquid and yellow liquid (depending on the degree of attack).
- pH: 3 - 5
- Density: 1,03 ± 0,01 g/cm³
- Dynamic viscosity (L3 at 250 rpm): 200 ± 25 mPa·s
- Viscosity in Ford Cup 4mm: 24 ± 2s
- Application temperature: >5°C
- Dry to touch: 1 - 2 hours
- Clean-up: 3 - 24 hours

General characteristics

- Aqueous dispersion of natural organic acids and emulsion of special paraffin waxes.
- Solids: 23 ± 5 %.

Composition and application of concrete:

- For good results, the concrete must be homogeneous. Concrete to be deactivated should be trowelled and smoothed, and if necessary a light vibration can be applied for a short time. Strong vibration can expose the finer aggregates, separating the mix.
- The type of cement and the dosage influence the setting time of the concrete. Using a high cement dosage in the concrete formulation will reduce the deactivation depth. Note that inert aggregates affect the final aesthetic appearance of the surface (more open or closed appearance).
- We recommend the use of synthetic monofilament fibres to increase the cohesion of the concrete to be deactivated and thus facilitate its application.
- Before starting any work, we recommend that some tests are carried out before applying to the entire surface: spray NATURCEM® on surfaces close to fresh concrete (i.e. small painted pots, wall coverings, stones, etc...) in order to make sure that the surface retarder does not soil the elements.
- Wait until the bleeding water has disappeared (approximately 30 minutes after applying the concrete). Shake the product to make sure it is homogeneous. Spray the product evenly with a 0.79 mm diameter Nozzle at 2/4 bar.

Exposure of the aggregate:

- The concrete shall be washed with water at a pressure of 100 to 150 bar. The operator shall ensure that he keeps the nozzle 20 to 40 cm from the concrete surface. The spray should form a 45° angle to the deactivated concrete.
- Cleaning should be carried out within 3 to 24 hours after application. In case the product is exposed to strong winds or sun, and/or in case the concrete has a low water/cement ratio, with a temperature below 35°C, this operation must be carried out between 4 and 12 hours. Above 35°C, the concrete should be washed between 3 and 8 hours.

Choice of product:

- The depth of exposure depends on the size of the aggregate, and should be less than or equal to 1/3 of the largest aggregate size. The choice of the appropriate NATURCEM® reference depends on many parameters (cement dosage, type of cement, water/cement ratio, workability and environmental conditions, etc.). It is recommended to carry out some tests on site in order to adjust the correct performance of the product.

Testing:

- The following table provides indicative information on the deactivation depth to be used depending on the size of the aggregates.
- On-site tests under real conditions will be necessary to define the exact depth of exposure (which depends on the dosage and type of cement, the outside temperature and other factors).

Reference	Colour	Degree of attack	Aggregate size
Low	Blue	2	5-8
Medium	Pink	4	10-14
High	Yellow	5	14-18

When applying, cover the entire surface, trying to leave a uniform film and avoiding thick layers or puddles.

The application should be made at ambient and substrate temperatures between 5°C and 30°C, without excessive wind.

Special precautions

It is recommended to comply with the following measures:

Non-flammable product.

In case of contact with skin wash with soap and water. Never use solvents or thinners. Do not swallow. In case of ingestion do not induce vomiting and seek medical attention immediately.

The following measures are recommended:

- Good ventilation.
- Use of chemical absorbent mask.
- Protective goggles to prevent splashing.
- Rubber gloves.

Empty containers should be disposed of in accordance with the legal regulations in force. To prevent the product from drying out or thickening, close the lid after each use. Keep out of reach of children.

Packaging

It is packaged in 5 and 25 litre containers.

Cleaning of tools

The tools are washed with water immediately after use.

Storage conditions

The product should be stored in its original sealed packaging and protected from the weather at temperatures between 10°C and 30°C, in a dry and well-ventilated place, away from heat sources and direct sunlight. The shelf life is 1 year from the date of manufacture, properly stored.



The product must not be used for purposes other than those specified, without first having written instruction in its handling. It is always the responsibility of the user to take appropriate measures in order to comply with legislative requirements. The Safety Data Sheets of the product are at the disposal of the professional.

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