

Water based, membrane forming concrete curing compound

Description

NIROCURE WB is a white pigmented membrane forming wax based curing compound, suitable for curing of newly placed or freshly de-shuttered concrete, assists in the retention of water during hydration.

The resultant film retains sufficient moisture in the concrete to ensure full hydration of the cement, essential for optimum strength development. Membrane cured concrete is typically harder and exhibits a dust free surface with a reduced incidence of drying shrinkage cracks.

Uses

As a more effective and economical alternative to hessian and water and polythene curing regimes. Suitable for use on all large area concrete surfaces, such as airport runways, concrete roads and bridgeworks. It is not recommended for application when subsequent renders, toppings or coatings are to be applied within the degradation time unless it is removed by cleaning if insufficient time has elapsed to achieve full degradation.

Advantages

- ✓ Eliminates the need for water ponding
- ✓ Improves moisture retention in concrete
- ✓ Prevents rapid water evaporation
- ✓ Promotes a harder dust free surface
- ✓ Reduces drying shrinkage
- ✓ Reduces the incidence of hairline cracks
- ✓ High curing efficiency
- ✓ Daylight reflectance value > 60%.
- ✓ Water based - user friendly
- ✓ Reduced labour costs
- ✓ Cured film is white and water repellent

Characteristics

Appearance	White liquid
Specific gravity (25°C)	1 ± 0.05
Dry film appearance	White
Water loss (ASTM C156)	< 0.5 Kg/m ² at 72 hours
Drying Time	< 3 hours
Day light reflectance (ASTM E1347)	> 60%

Standards compliance

ASTM C309 Type II Class A, BS 7542: 1992

Directions for use

Application

Stir NIROCURE WB thoroughly before use without dilution.

Exposed concrete slabs: NIROCURE WB should be spray applied on to the newly placed concrete slab as soon as possible after it is free from visible surface water, e.g., typically 1 to 2 hours after placing.

Shuttered and precast concrete: NIROCURE WB curing agent should be spray applied to all surfaces as soon as formwork has been removed or the element demoulded.

In all cases the nozzle of the spray should be held approximately 450mm from the concrete surface and should be passed back and forth to ensure complete and even coverage. The pump pressure should be maintained at a level to produce a fine spray ensuring complete coverage of the surface.

In case if spray application is not possible, ensure to apply using short-nap roller. If bubbles appear on the surface, slow down the speed of rolling. Do not overlap. Take adequate care to prevent marring of the concrete surface.

Drying time is approximately 2 hours at 25°C with the relative humidity at 50%. Higher humidity or a lower temperature will increase the drying time. Note that the 2 hours' time is for drying only, the full strength of the curing membrane will not develop for 2 – 4 days. Protect the applied surface from rain until the film has totally dried.

Subsequent surface finishes It is important that the complete removal of the NIROCURE WB should be ensured prior to the application of any surface finish or additional treatment. It is recommended that where the concrete is to receive a coating or the application of tiles, the use of NIROCURE AR is considered. (See separate datasheet).

Packaging

NIROCURE WB is available in 20 and 225 litre drums.

Coverage rate

The recommended coverage rate is between 4 to 6 m²/litre. Coverage rates outside this recommended range may be used if necessary and suitable to meet specific requirements. Contact local NIRMAN CHEMICALS office for advice in such cases.

Technical support

NIRMAN CHEMICALS provides technical advisory services for on-site assistance and guidance on mix design, optimum dosage evaluation of trials.

Storage and Shelf life

Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air-conditioned environment.

Shelf life is 12 months when stored as above.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.

For specific storage advice consult our local NIRMAN CHEMICALS representative.

Safety precautions

NIROCURE WB should not be swallowed or allowed to come into contact with skin and eyes. Avoid inhalation of vapours and ensure adequate ventilation.

Some people are sensitive to resins and solvents. Resin Barrier creams provide additional skin protection. Should accidental skin contact occur, remove immediately with a resin removing cream followed by washing with soap and water - do not use solvent. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting

Fire

NIROCURE WB is water based and non-flammable.

Cleaning of Tools

Use hot water and detergent to clean rollers and spray equipment before NIROCURE WB dries.

Note

All Technical Data Sheets are updated on regular basis; it is the user's responsibility, to obtain the most recent issue.

Field services where provided, does not constitute supervisory responsibility, for additional information contact our local NIRMAN CHEMICALS representative.

Disclaimer

Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labor involved in the application are beyond our control.



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TDS 2021/ROO