



PC-Buildcure® WB

Water based concrete curing compound

PC-Buildcure® WB is a water-based concrete curing compound that employs a low-viscosity wax emulsion. The emulsion, supplied as a white coating, forms a transparent film upon drying. Upon application to fresh cementitious surfaces, the emulsion initially creates a non-penetrating white coating, which subsequently dries into a clear film. By providing a cement shrinkage barrier, it prevents moisture loss, resulting in more efficient hydration, improved durability and reduced cement shrinkage. Moreover, **PC-Buildcure® WB** is also available in a white-pigmented version. It features a white-pigment based on titanium dioxide, which meets specifications requiring pigmentation for the reduction of solar temperature gain.

USES

This spray-applied membrane is an effective means of retaining moisture during the concrete curing process. It's suitable for all general concreting applications, with particular advantages for large area surfaces such as airport runways, roads, and bridge works.

TECHNICAL DATA

Physical Properties	Typical Value
Chemical Base	Water-dispersed, acrylic copolymer
Appearance / Colour	Milky white liquid
Density	Density ~ 1.01 kg/l @ 25°C
Consumption	5 to 6.5 m ² /Litter

LIMITATIONS

There are two key considerations to keep in mind when utilizing **PC-Buildcure® WB** in concrete train or similar applications. Firstly, it's essential to avoid continuously recirculating the solution in high shear pumps since this can cause the emulsion to break down before spraying. If recirculation is necessary, it's recommended to use a low shear diaphragm pump for optimal results. Secondly, please note that the minimum application temperature should be 5°C to ensure proper functionality.

OVERCOATING AND REMOVAL

Before applying a coating to concrete surfaces, it is vital to remove **PC-Buildcure® WB** to ensure sufficient bonding of the coating material to the concrete substrate. While **PC-Buildcure® WB** will gradually wear away over time due to exposure to UV light and normal traffic, complete removal can be achieved through high-pressure steam, water jet, or light sand blasting.

Furthermore, a white pigmented variation of **PC-Buildcure® WB** is also available. This product incorporates titanium dioxide-based white pigment, making it suitable for applications requiring reduced solar temperature gain according to specific requirements.

ADVANTAGES

- Improved curing of concrete enhances the hydration process and provides a more durable concrete.
- Control of moisture loss improves surface quality, reducing permeability, minimizing surface cracking and shrinkage.
- Fugitive color provides a visual guide during application.
- Also available in white-pigmented grade.
- Water based, therefore, non-flammable.
- Spray application reduces labor costs, therefore, eliminates the need for alternative curing systems.

APPLICATION

To ensure uniform dispersion of the pigment, it's recommended to stir **PC-Buildcure® WB** white before use. The application of **PC-Buildcure® WB** should be initiated by spraying it onto the surface of fresh concrete as soon as it is free from surface water.

It's essential to avoid applying it when bleed water is present on the concrete surface. To ensure complete coverage, spray the nozzle approximately 450mm from the concrete surface while moving it back and forth. The guide for the area covered is provided by the fugitive white color during application. An even, fine spray is achieved by maintaining pump pressure. After spraying, no additional water or material is needed to continue the curing process. Until the concrete surface can bear surface loads, it shouldn't be disturbed. It's important to wait until the applied film is fully dry before trafficking it, and care should be taken to avoid breaking the film.

Immediately after demolding, **PC-Buildcure® WB** may be applied to the surface of freshly hardened concrete. However, it's crucial to ensure that the concrete surface is damp and not dry. Absorption of **PC-Buildcure® WB** due to incorrect film formation on dry surfaces may result in staining and later difficulty in removal.

EQUIPMENT

To apply **PC-Buildcure® WB**, one may use spray equipment such as a knapsack or motorized sprayers that produce a fine mist, without causing damage to the emulsion. However, it's recommended to conduct an application trial to determine the suitability of the equipment.



HEALTH AND SAFETY

PC-Buildcure® WB does not fall under the hazardous category according to the current regulations (refer to notes 1 and 2 below). However, it is critical to avoid swallowing or direct contact with skin and eyes, whether in bulk or spray form. Wearing protective gloves and goggles is highly recommended. In the event of skin contact, wash with water immediately. In case of eye contact, rinse thoroughly with water and seek medical attention. If ingested, do not induce vomiting and seek medical attention immediately.

For additional information, please consult the Material Safety Data Sheet available for this product.

STORAGE

PC-Buildcure® WB offers a minimum shelf life of 12 months, providing it's stored within a temperature range of 4°C to 35°C. It's important to avoid freezing and extended exposure to heat or direct sunlight. In the event the product's temperature falls beyond the specified range, kindly contact the PC-WC Technical Service Department for appropriate guidance. To prevent moisture loss by evaporation, keep the containers tightly sealed and airtight.

FIRE

PC-Buildcure® WB is water based and non-flammable.

CLEANING AND DISPOSAL

- Spillages of **PC-Buildcure® WB** should be absorbed onto sand, earth or vermiculite and transferred to suitable containers. Remnants should be hosed down with large quantities of water.
- The disposal of excess or waste material should be carried out in accordance with local legislation under the guidance of the local waste regulatory authority.



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All technical data in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

The information, particularly the recommendations relating to the application and end-use of PC-WC products, are given in good faith based on PC-WC's current knowledge and experience of the products when properly stored, handled and applied under normal conditions by PC-WC recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or any other advice offered. The user must test the product's suitability for the intended application and purpose. PC-WC Global FZ-LLC reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Our technical assistance is at the disposal of the users. Consult the latest update of the technical data sheet on our [website www.pc-wc.com](http://www.pc-wc.com)