



PC-Buildcure® AC

Ready to use, liquid membrane-forming compound based on acrylic emulsions in water for curing concrete

PC-Buildcure® AC roper curing is crucial for the durability and strength of concrete. Traditional curing methods are time-consuming and start after initial water evaporation. PC-Buildcure® AC, an acrylic emulsion-based membrane-forming curing compound, is a solution that creates a seamless film on fresh concrete and mortars, preventing capillary water evaporation, avoiding cracks, and promoting efficient hydration. It is applied once during the critical hardening period and complies with ASTM C 309.

USES

PC-Buildcure® AC is a versatile solution that finds utility in numerous applications. It's particularly useful in large areas of concrete that are directly exposed to harsh environmental conditions like sunlight and heavy winds. Additionally, it's an ideal choice for early plastering, concrete bridges, canal linings, airport structures, motorways, harbors, port piers, dams, irrigation structures, roof decks, retaining walls, overhead patch repairs, and inaccessible areas, as well as tall structures like chimneys and cooling towers.

TECHNICAL DATA

Physical Properties	Typical Value
Chemical Base	Acrylic co-polymer
Appearance / Colour	Milky white liquid
Density	Density ~ 1.01 kg/l @ 25°C
Consumption	4 to 5.5 m ² /Litter
Reflectance	>80 % (As per ASTM E 97)

LIMITATIONS

There are two key considerations to keep in mind when utilizing PC-Buildcure® AC in concrete trains 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.

EQUIPMENT

To apply PC-Buildcure® AC, 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.

ADVANTAGES

- Provides protection against acute sun rays and UV rays, preventing quick drying of freshly placed concrete.
- Especially useful in cases where early plastering is required.
- Ensures optimum hydration, leading to stronger end hydration products.
- Allows for better quality control at job sites.
- Does not alter the normal setting of cement.
- Minimizes shrinkage cracks during early stages of curing.
- Single application, saving on labor costs.
- Easy to apply, ideal for overhead curing and hard-to-reach areas (such as chimneys).
- Suitable for areas with water shortage, eliminating the need for water spraying, hessian, PE films, and other alternatives.
- Increases solar reflectance, reducing the temperature of the concrete.
- Fixes micro-cracks in the concrete, with no need for removal before treatment.

APPLICATION

For optimal results, apply PC-Buildcure® AC immediately after the disappearance of water sheen from the surface. Ideally, this should be done within 30 minutes, depending on the temperature. Avoid applying PC-Buildcure® AC when standing water is present. We recommend fogging the surface before application.

To cure concrete retained on form works, thoroughly wet the concrete after opening the shuttering, then spray or brush PC-Buildcure® AC. You can use a regular knapsack sprayer (like an insecticide tree sprayer) with a suitable nozzle for application. For larger areas, motorized continuous spraying devices are recommended. Hold the nozzle about 0.7 to 1.0 meters from the surface and ensure complete area coverage. To achieve a fine spray, maintain the pump pressure throughout the operation. Quality control is easy because the product is whitish in color, and areas that were missed can be sprayed again.

If used correctly, certain subsequent coats can be applied without adhesive problems. Additional substrate preparation is not necessary. Standard coating systems and plasters can be applied without removing PC-Buildcure® AC. However, reactive resin systems, such as epoxy or polyurethane resins, may not always be compatible with PC-Buildcure® AC. Specific trials should be carried out before applying such systems.



HEALTH AND SAFETY

PC-Buildcure® AC 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® AC 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® AC is acrylic emulsions based and non-flammable.

CLEANING AND DISPOSAL

- Spillages of **PC-Buildcure® AC** 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)