

Concrete Surface Treatment

Technical Data Sheet
Edition 12/2013
Number 821

Cure-Crete® WB

Water based concrete curing compound.

Description:

Cure-Crete® WB is a water based concrete curing compound based on a low viscosity wax emulsion. It is supplied as a white emulsion which forms a clear film on drying. When first applied to a fresh cementitious surface the emulsion breaks to form a continuous, non-penetrating white coating.

This dries to form a continuous clear film which provides a barrier to moisture loss, ensuring more efficient cement hydration, improved durability and reduced shrinkage.

Uses:

- + As a spray applied membrane to retain moisture in concrete for effective curing
- + Suitable for all general concreting applications and of particular benefit for large area concrete surfaces, such as airport runways, roads and bridgeworks

Advantages:

- + Improved curing of concrete enhances cement hydration and provides a more durable concrete
- + Control of moisture loss improves surface quality, reducing permeability, producing a hard wearing, dust-free surface and minimizing potential for surface cracking and shrinkage
- + Fugitive color provides visual guide during application
- + Water based, therefore, non-flammable
- + Spray application reduces labor costs and eliminates the need for alternative curing systems

Standards compliance

Cure-Crete® WB gives 75% or greater curing efficiency when tested to BS 7542 and complies with ASTM C309 and AASHTO M148 as Type 1.

Storage

Cure-Crete® WB has a minimum shelf life of 12 months provided the temperature is kept within the range of 4°C to 35°C. Freezing and prolonged exposure to heat or direct sunlight should be avoided.

Containers should be kept sealed and airtight to prevent loss of moisture by evaporation.

Precautions Health and safety;

For further information refer to appropriate Product Safety Data Sheet.

Fire; Cure-Crete® WB is water based and non-flammable.

Please consult our "Technical Services".

The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position.

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Application instructions

Minimum application temperature: 5°C

Cure-Crete® WB should be spray applied to the surface of fresh concrete.

Application should begin immediately the concrete is free from surface water.

Do not apply if bleed water is forming or present on the concrete surface.

The spray nozzle should be held approximately 450 mm from the concrete surface and passed back and forth to ensure complete coverage.

The film forming layer (white color) during application provides a guide to the area covered.

Pump pressure should be maintained to give an even, fine spray.

After spraying, no further application of water is necessary to ensure continued curing.

The concrete surface should not be disturbed until it has sufficient strength to bear surface loads.

The applied film should not be walked on before it is fully dry and care should be taken to ensure that the film is not broken.

Cure-Crete® WB may also be applied to the surface of newly hardened concrete immediately after demoulding. In such cases the concrete surface must be damp and not dry. Dry surfaces may prevent correct film formation and cause absorption of the **Cure-Crete® WB** which may lead to staining and difficulty in later removal.

Coverage rate

The recommended coverage rate is between 3.5 and 5.0 m²/litre (0.2 to 0.3 litres/m²). Coverage rates outside this recommended range may be used if necessary and suitable to meet specific requirements.

Equipment; Spray equipment producing a fine mist without damaging the emulsion may be used for **Cure-Crete® WB**, such as knapsack or motorised sprayers.

The suitability of equipment should be ensured by an application trial.

Equipment cleaning; Spray equipment should be cleaned immediately after use by flushing through with water. If spray nozzles become blocked with wax particles these may be easily cleared with white spirit.

Overcoating and removal; **Cure-Crete® WB** must be removed from a concrete surface before application of a subsequent coating to ensure a good bond of the coating material to the concrete.

Cure-Crete® WB will be slowly removed by physical abrasion in normal trafficking and exposure. To ensure complete removal use high pressure steam, water jet or light sand blasting.

Limitations; **Cure-Crete® WB** should not be continuously re-circulated in high shear pumps in concrete train or similar applications as this may cause a breakdown of the emulsion before spraying. If continuous recirculation is necessary, the sprayer should be fitted with a low shear diaphragm pump. In extreme drying conditions additional curing using polythene or wet muslin may be required.

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