# Concure WB309\*



## Water based concrete curing compound

### 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 minimizing potential for surface cracking and shrinkage
- Water based, therefore, non-flammable
- Spray application reduces labour costs and eliminates the need for alternative curing system

# Standards compliance

Concure WB309 complies with ASTM C309 as Type 1D curing compound.

### **Description**

Concure WB309 is a water based concrete curing compound is based on a low viscosity wax emulsion which incorporates a special alkali reactive emulsion breaking system.

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.

# **Properties**

Appearance	:	White emulsion which forms a clear film on drying
Specific gravity	:	Typically 0.98 – 1.00 @ 25°C
Minimum application temperature	:	5°C

**Curing efficiency:** When tested to International Standards for curing efficiency, Concure WB309 has shown the following results:

ASTM C309 average water loss of 0.22 kg/m $^2$  at an application of 4.0 m $^2$ /litre.

### **Technical support**

Fosroc offers a comprehensive technical support service to specifiers, end users and contractors. It is also able to offer on-site technical assistance, AutoCAD facility and dedicated specification assistance in locations all over the world

### Instructions for use

### Mixing

The drum should be rolled few times application to allow for proper mixing & agitation.

### **Application**

Concure WB309 should be spray applied to the surface of fresh concrete. Application should begin immediately once 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. Pump pressure should be maintained to give an even, fine spray.

After spraying, no further application of water or other material 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.

Concure WB309 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 Concure WB309 which may lead to staining and difficulty in later removal.

### Coverage rate

Typically within the range of  $4.0 - 5.0 \text{ m}^2/\text{litre}$ . Coverage rates outside this recommended range may be suitable to meet specific requirements. Contact local Fosroc office or representative for advice in such cases.

### **Equipment**

Spray equipment producing a fine mist without damaging the emulsion may be used for Concure WB309, such as knapsack or motorized 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 or Fosroc Solvent 102.

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### Overcoating and removal

Concure WB309 should be removed from concrete surfaces prior to application of a coating, this is necessary to ensure adequate bond of coating material to the concrete substrate.

However Concure WB309 will slowly be removed by physical abrasion in normal trafficking conditions or exposed to UV light. To ensure complete removal use high pressure steam, water jet or light sand blasting.

### Limitations

- Concure WB309 should not be continuously recirculated in high shear pumps in concrete train or similar applications. If continuous recirculation is necessary, the sprayer should be fitted with a low shear diaphragm pump
- Specifications calling for resin or solvent based curing membranes can be met using Concure 90

### **Estimating**

#### Supply

Suppry			
Concure WB309	:	20 & 210 litre drums	
Coverage			
Concure WB309		4.0 - 5.0 m <sup>2</sup> /litre	
College WD303		T.U - J.U III /IIII C	

# **Storage**

Concure WB309 has a shelf life of 12 months minimum if kept in a dry store between 4°C and 35°C in the original, unopened containers.

Freezing or prolonged exposure to heat or direct sunlight must also be avoided. Should the temperature of the product fall outside this range then the Fosroc Technical Service Department should be contacted for advice.

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

### **Precautions**

### Health & safety

Concure WB309 does not fall into the hazard classifications of current regulations (see notes 1 and 2 below). However, it should not be swallowed or allowed to come into contact with skin and eyes either in bulk or spray form.

Suitable protective gloves and goggles should be worn. Splashes on the skin should be removed with water. 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.

For further information consult the Safety Data Sheet available for this product.

### Fire

Concure WB309 is water based and non-flammable.

### Cleaning and disposal

Spillages of Concure WB309 should be absorbed onto sand, earth or vermiculite and transferred to suitable containers. Remnants should be hosed down with large quantities of water.

Spillages of component products should be absorbed onto earth, sand or other inert material and transferred to a suitable vessel.

Disposal of such spillages or empty packaging should be in accordance with local waste disposal authority regulations.

Note 1: CPL Regulations 1984 Supply - Schedule 1 Note 2: HSE publication Guidance Note EH40

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Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Service

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