

# Darakote® 90WX

## Curing Membrane

### Description

Darakote® 90WX is a refined, white, wax in water-emulsion-based curing membrane used to protect fresh concrete surfaces from the undesirable effects associated with too rapid evaporation of surface moisture. This protection is achieved by spraying Darakote 90WX onto the fresh concrete surface which rapidly forms an impermeable skin of wax over the surface. Darakote 90WX, applied at a coverage rate of 4.5 m<sup>2</sup> per litre, exceeds the 90% efficiency index for testing curing efficiency when determined in accordance with the test specified in the Ministry of Public Building and Works General Specification 201: 1969.

Applied at a coverage rate of 4.5 m<sup>2</sup> per litre, Darakote 90WX exceeds the 90% efficiency index for testing curing efficiency when determined in accordance with DOT specification for Roads and Bridge Works 1976, Clause 2709. Darakote 90WX complies with DOT specification for Roads and Bridge Works 1976, Clause 2603 and with DOE specification for Aircraft Pavements 1972, Clause 810.

Darakote 90WX has been tested in accordance with BS 7542: Method of Test for Curing Membranes for Concrete, and shown to exceed the 90% efficiency index requirement. Darakote 90WX complies with the requirements of ASTM C 309, Type 1. When tested in accordance with ASTM C 156



Darakote 90WX, applied at a coverage rate of 4.5 m<sup>2</sup> per litre, restricts the water loss to less than 0.55 kg per m<sup>2</sup> of surface, in 72 hours.

### Benefits and Advantages

- Provides a labour saving method of ensuring all fresh concrete is cured properly, without the use of “ponding” techniques, or the continuous wetting of hessian stretched over the concrete surface
- Ingredients remain in suspension and no special pre-use agitation is required
- A single application only is required
- When used as recommended Darakote 90WX will not damage concrete or impair its properties in any way
- Spillages can be hosed away with water
- Contains no flammable solvent and does not constitute any fire hazard. No special precautions are required for storage away from sources of ignition.
- No solvent vapour or noxious fumes are given off, and it can, therefore, be used indoors or in enclosed areas without provision for ventilation.

- Is miscible with water and no solvent is required to clean spray equipment, provided the membrane is not allowed to completely harden on the equipment
- Is a white emulsion enabling the sprayed areas to be easily identified. On drying, the whiteness gradually disappears leaving a clear wax film

## Typical Properties

### Appearance:

White mobile liquid

### Flash Point

Water based. Not applicable.

### Freezing Point:

0°C

## Coverage Rates

**4.0 m<sup>2</sup> - 5.5 m<sup>2</sup> per litre**

The quoted efficiency index of each product relates to that obtainable by a rate of application as set out above. In certain circumstances, adequate curing can be achieved with an extended coverage rate. However, it is essential not to apply the coating too thinly. Darakote 90WX is supplied ready for use and should not be diluted with water or solvent. Ideally it should be sprayed onto the concrete surface as soon as the formwork is removed or alternatively as soon as the free surface water has disappeared from the horizontal surfaces. Fan nozzle 00 is recommended for use with spray equipment.

Darakote 90WX should not be sprayed onto surface dry concrete. Where the concrete has lost some of its "greenness" it

is essential to dampen the surface with water. However, Darakote 90WX should not be sprayed onto concrete which has obvious free water standing on it.

Darakote 90WX deposits a wax based film onto the concrete. This film will degrade mechanically by abrasion from foot and road traffic. However, it will not degrade by natural weathering. On vertical surfaces the membrane will remain and will interfere with any subsequent surface treatment, unless deliberately removed.

Grace Construction Products will offer advice on the range of equipment available for the application of Darakote Curing Membranes. Full details are available on request.

It is recommended that equipment is cleaned immediately with water following any period of spraying. Any delay in cleaning will necessitate the use of solvent to clean equipment. Particular attention should be paid to the thorough cleaning of the spray jets and moving parts of the equipment.

## Packaging

Darakote 90WX is supplied in 205-litre, non-returnable containers. Alternatively, bulk deliveries can be arranged.

## Storage

Darakote 90WX should be stored above 0°C and protected from frost, otherwise permanent damage may occur. In common with most emulsions, if Darakote 90WX is allowed to freeze the damage is irreversible and the product cannot be reconstituted.

**Storage life in manufacturer's drums:** 12 months from date of manufacture.

**Storage life bulk storage:** 12 months from date of delivery.

## Health and Safety


See Darakote 90WX Safety Data Sheet or consult Grace Construction Products

## Technical Service

The Technical Service department of Grace Construction Products is available to assist you in the correct use of our products. Contact:

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