



Conplast WP500NR

Hydrophobic absorption reducing admixture

Uses

- Conplast WP500 / WP500NR drastically reduce water absorption in structural and precast concrete

Advantages

- Not bitumen based
- Provides integral protection, ensuring reduced permeability throughout the concrete
- Integral protection is maintained even if surface damage occurs.
- Lower water : cement ratio improves compressive strength at same workability
- Fully compatible with certain Fosroc surface coatings and finishes.

Description

Conplast WP500 / WP500NR chloride free admixture is supplied as a brown liquid which instantly disperse in water.

Conplast WP500 / WP500NR is an organic liquid which reacts with products of the cement hydration process to produce a hydrophobic material which repels external water, reducing absorption into the concrete.

Technical Support

Fosroc provides a technical advisory service for on-site assistance and advice on admixture selection, evaluation trials and dispensing equipment. Technical data and guidance can be provided for admixtures and others products for use with fresh and hardened concrete.

Typical dosage

The optimum dosage of Conplast WP500 / WP500NR to meet specific requirements should always be determined by trials using the materials and conditions that will be

experienced in use. This allows the optimisation of admixture dosage and mix design and provides a complete assessment of the mix. The normal recommended dosage is 1.5 litres per 100kg cement.

Uses at other dosage

Dosages other than those given on this sheet may be used to meet particular mix requirements provided that adequate supervision is available. Compliance with requirements must be assessed through trial mixes.

Contact the Fosroc Technical Service Department for advice in these cases.

Properties

Appearance	:	Brown Solution
Specific Gravity	:	typically 1.105 at 20°C
Chloride content	:	Nil to BS 5075

Application Instructions

Compatibility

Conplast WP500 should not be used together with other retarding admixture to avoid extensive retardation in concrete.

Conplast WP500NR is compatible with Conplast range of retarder and plasticiser or equivalent when used in the same concrete mix but should be added to the mix separately and must not be mixed together prior to addition. The resultant properties of mixes containing more than one admixture should be accessed by the trial mix procedure recommended on this data sheet.

Conplast WP500NR is recommended for concrete containing retarding admixture conform to ASTM C494 Type D or BS 5075 Part 1.

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Conplast WP500 / WP500NR is suitable for use with all types of Portland cements and cements replacement materials such as PFA, GGBFS and microsilica.

Dispensing

The correct quantity of Conplast WP500 / WP500NR should be measured by means of a recommended dispenser. The admixture should be then added to the concrete with the mixing water to obtain the best results. Contact the Fosroc Technical Service Department for advice regarding suitable equipment and its installation.

Effects of overdosing

An overdose of double the intended dose of Conplast WP500 / WP500NR may result in increased retardation and workability; hence reduce the short term strength development. Long term strength is unlikely to be affected.

Curing

As with all structural concrete, good curing practice should be maintained, particularly in situations where an overdose has applied. Water spray, wet hessian or a Concure Spray applied curing membrane should be used.

Typical performance example

Conplast WP500 / WP500NR meets the water absorption requirements of draft European standard EN 934-2.

Many variables in concreting materials and conditions can affect the selection and use of an admixture. Trials should be carried out using relevant materials and conditions in order to determine the optimum mix design and admixture dosage to meet specific requirements.

A typical performance example from evaluation studies of Conplast WP500 / WP500NR is included on this datasheet. The values quoted are representative of results

obtained and are provided as illustrations of the performance.

Because of the variability of concreting material, the results should only be taken as typical of the performance to be expected. Results quoted are not necessarily directly comparable with results obtained elsewhere for Conplast WP500 / WP500NR or other products.

**Example: Concrete grade 45/20, 400kg cement.
0.38 free w/c**

Mix	Dosage		Absorption
	WP500 (%)	WP500NR (%)	%
Control	Nil	Nil	2.8
Treated	1.5	1.5	<1.0

Limitations

The use of Conplast WP500 / WP500NR will not make poor quality concrete waterproof. Good concrete practise must be followed at all times. Well graded aggregates must be used and a minimum cement content of 350kg/m³ is recommended. Consult the fact sheet available on the use of Conplast plasticisers in the water retaining structures for further information. Supercast Waterstops must be provided between lifts of concrete and joints in floor bays.

Estimating

Packaging

Conplast WP500 / WP500NR has a minimum shelf life of 12 months. If the temperature is kept within the range of 2°C to 50°C. Contact the Fosroc Technical Service Department for advice should the temperature of the product fall outside this range.

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Precautions

Health & Safety

Conplast WP500 / WP500NR is mildly alkaline and should not be swallowed or allowed to come into contact with skin and eyes.

Wear suitable protective gloves and goggles. In case of contact with skin, wash immediately with soap and 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

Conplast WP500 / WP500NR is a water based and non flammable.

Cleaning and disposal

Spillages of Conplast WP500 / WP500NR should be absorbed onto sand, earth or vermiculite and transferred to suitable containers. Hose down remnants with large quantities of water.

The disposal of excess of water or waste material should be carried out in accordance with local legislation under guidance of local waste regulatory authority.

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Important note

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