

Conplast NC

constructive solutions

Chloride-free accelerating admixture

Uses

- To accelerate the stiffening and early strength gain of Portland cement concrete and mortar.
- Typical applications include concrete or mortar placed in cold weather and pre-cast concrete.

Advantages

- Particularly effective in assisting to offset the delaying effect of low temperatures on setting and strength gain.
- Accelerated setting gives added protection against early age frost attack.
- Also provides a degree of water reduction or increased workability.
- Suitable for use in bricklaying mortar.
- Chloride-free, safe for use in reinforced concrete.

Standard compliance

Conplast NC complies with ASTM C-494 as Type C and BS 5075 Part 1.

Description

Conplast NC chloride-free accelerating admixture is supplied as a light straw-coloured solution that instantly disperses in water.

Conplast NC accelerates the early stages of cement hydration, producing more rapid stiffening and allowing strength gain to commence at an earlier stage. This effect is particularly noticeable at low temperatures and is most significant in the first 24 hours after mixing.

Technical support

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

Typical dosage

The optimum dosage of Conplast NC to meet specific requirements should always be determined by trials using the materials and conditions that will be experienced in use. The allows the optimisation of admixture dosage and mix design and provides a complete assessment of the concrete

mix. A starting point for such trials is to use a dosage within the normal typical range of 1.50 to 3.00 litre/100 kg cement.

Use at other dosages

Dosages outside the typical range quoted above may be used if necessary and suitable 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:	Straw coloured liquid
Specific gravity:	Typically 1.26 at 20°C
Chloride content:	Nil to BS 5075
Alkali content:	Typically less than 155.0 g. Na₂O
	equivalent/litre of admixture. A fact
	sheet on this subject is available.

Instruction for use

Compatibility

Conplast NC is compatible with other Fosroc admixtures in the same concrete mix. All admixtures should be added to the concrete separately and must not be mixed together prior to addition. The performance of concrete containing more than one admixture should be assessed by trial mixes to ensure the desired combination of effects is obtained.

Conplast NC is suitable for use with ordinary Portland cements. Contact the Fosroc Technical Service Department for advice on use with sulphate resisting cements and cement replacement materials.

Durability

Conplast NC has no detrimental effect on the protection given to embedded steel by the alkalinity of cement and is safe for use as an accelerator in situations where chloridecontaining admixtures cannot be used.

Dispensing

The correct quantity of Conplast NC should be measured by means of a recommended dispenser. The admixture should then be added to the concrete with the mixing water to obtain the best results.

Contact the Fosroc Technical Service Department for advice regarding suitable dispensing equipment and its installation.

Conplast NC

Effects of overdosing

An overdose of double the intended amount of Conplast NC may result in increased acceleration. In common with other accelerators this may slightly reduce the ultimate strength of the concrete.

Testing has shown no detrimental effect on embedded steel even at four times overdose.

Curing

As with all structural concrete, good curing practice should be maintained. Water spray, wet hessian or a Concure spray applied curing membrane should be used.

Limitations

Conplast NC is most effective at low temperatures and early ages. Where compressive strength gain is the major requirement, and stiffening rates are less important, a more cost effective performance may be obtained through the use of a Conplast plasticiser or superplasticiser.

Normal precautions for cold weather concreting should be followed where Conplast NC is used.

Estimating - Packaging

Conplast NC is available in drum or bulk supply.

Storage

Conplast NC has a minimum shelf life of 12 months provided the temperature is kept within the range of 2°C to 50°C. Should the temperature of the product fall outside this range then the Fosroc Technical Service Department should be contacted for advice.

Conplast NC is an oxidising agent and should be stored away from reducing agents and combustible materials.

Freezing point: Below -16°C.

Crystallisation may occur below -1° C. If crystallisation does occur it is important that the product is reconstituted before use.

Precautions

Health and safety

Conplast NC is toxic and should not be swallowed or allowed to come into contact with skin and eyes. Wear suitable protective gloves and goggles.

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 Material Safety Data Sheet available for this product - **do not** induce vomiting.

Fire

Conplast NC is water based and non-flammable but should be stored away from combustible materials.

Cleaning and disposal

Spillages of Conplast NC should be absorbed onto sand, earth or vermiculite and transferred to suitable containers. Do not allow Conplast NC to enter rivers or drains.

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.



Fosroc Jordan

Head Office P.O Box 253, King Abdullah II Industrial State Sahab 11512, Jordan

Important note:

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Services, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification of information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it.

Regional Offices:

 Amman-Khalda Offices:
 Tel: (06) 535 9562

 Amman-Sahab Factory:
 Tel: (06) 402 2665

 Aqaba Showroom:
 Tel: (03) 205 0061

email: enquiryjordan@fosroc.com

Fax: (06) 535 9563 Fax: (06) 402 9475 Fax: (03) 205 0062