

Conplast Crystalline

Integral waterproofing admixture based on crystalline formation to produce water tight concrete.

Uses

Conplast Crystalline is an integral waterproofing admixture to produce water tight concrete. The active chemical in Conplast Crystalline react with moisture available in concrete to produce non soluble crystalline formation throughout the pores of capillary tracks thus making concrete permanently sealed against water penetration from any direction.

Conplast Crystalline is developed to use in

- All types of concrete foundation below ground
- Water reservoir
- Tunnel Concreting
- Retaining walls and subways
- Deck slab - Bridges, plinth and intermediate slab used for car parking
- Water tank and Swimming pools
- Precast unit

Advantages

- Easy to use, require only mixing with concrete.
- Integral waterproofing system.
- Crack filling property with time up to 0.5mm width
- Exhibits good resistance to hydrostatic water pressure both surface.
- Compatible with our full range of water reducing admixture.
- More effective due to formation of crystalline in tiny capillaries.
- Reduce Shrinkage and Creep
- Increase Durability
- Permeability Reducing Admixture as per ACI.212.3R-2010

Standard Compliance

Conplast Crystalline has been tested in accordance with various standards such as IS 516 Part-2 Sec-1, IS 3085-1965 (Reaffirmed 2021), ASTM C 1260, ASTM C 1202-12, AASHTO T 277, ASTM C 1556-04, 1152/C, 1152M-04, DIN 1048, BSEN 12390 – part 8.

Description

Conplast Crystalline is a powder form with perfect blend of Portland cement with other ingredients. Crystalline chemicals react with water in concrete to form crystals structure in the tiny capillaries. These insoluble crystals structure that clogs

the pores. This process continues until all the chemicals have reacted.

Technical support

Fosroc provides technical advisory service for on-site assistance and guidance on mix design, optimum dosage evaluation of trials.

Properties

Appearance	: Grey powder
Bulk density	: 1400Kg/m ³
Specific gravity	: 1.275
pH	: 6.8
Workability Retention	: To be adjusted using water reducing and retarding admixture as required.
Compatible with cement	: Can be used with all cements including pozzolonic cements.
Permeability to water	: Has very low permeability compared to control concrete.
Setting time	: Confirm to IS 2645-2003 for initial and final.

* The uniformity parameters like specific gravity, pH, chloride content etc. will vary for specific customer requirements and mix design. Please refer our MTC issued for specific product configuration for measuring our product parameters that will be constantly and consistently administered.

Dosage

Recommended dosage of Conplast Crystalline is 0.8% by weight of total cementitious content. The optimum dosage of Conplast Crystalline to meet specific requirement should always be determined by conducting laboratory and batch trials.

Instruction for Use

Compatibility

Conplast Crystalline is compatible with our water reducing admixture when used in the same concrete mix, but should be added to the mix separately. The resultant properties of mixes containing more than one admixture should be assessed by the trial mix procedure recommended on this data sheet.

Conplast Crystalline

Conplast Crystalline is suitable for use with all types of Portland cements, SRC cements and cement replacement materials such as PFA, GGBFS and microsilica.

Dispensing :

The optimized quantity of Conplast Crystalline must be added directly into the wet concrete at the time of mixing. For Ready Mix Plants, Conplast Crystalline can be added at site and mixed to ensure uniform distribution throughout concrete mix.

In order to obtain uniform distribution, each kg of Conplast Crystalline must be mixed with one litre of water to form thin slurry form. Then Conplast Crystalline slurry shall be dispensed into transit mixer and mixed well before pumping or placing. Suggest not adding Conplast Crystalline powder directly into concrete. Make sure that water used for preparing slurry must be deducted from concrete total water to ensure designed water cement ratio. Consult with Fosroc technical department for additional information.

Curing

As with all structural concrete, good curing practice should be maintained, particularly in situations where an overdose has occurred. Water spray, wet hessian or Concure 1315 / Concure WB spray applied curing membrane should be used.



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Important note :

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification or 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 or information given by it.

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Estimation

Packing :

Conplast Crystalline packing 30kg bags.

Storage

Conplast Crystalline has a minimum shelf life of 6 months provided the temperature is kept within range of 5°C and 50°C.

Precautions

Health and safety

Conplast Crystalline is 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 the 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 Crystalline is non-flammable.

Cleaning and disposal

Spillages of Conplast Crystalline 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 or waste material should be carried out in accordance with local legislation under the guidance.