

HydroPlast® C

Crystalline Based Waterproofing Admixture for Concrete

Product Definition

Hydroplast C is a crystalline based chemical additive for concrete that reduces water absorption and water permeability from concrete. Hydroplast C is a water impermeability additive.

Use

HydroPlast C is recommended for use in the applications below.

- In all concrete applications where crystallized capillary water impermeability is desired.
- In plastered brick wall elements exposed to unpressurized or low pressure water
- Concretes for swimming pools
- Open channels and tunnel segment constructions.
- Concretes designed for wastewater treatment plants, dams, culverts and water reservoirs.
- Concrete elements under the high risk of water absorption by capillary suction.
- To reduce water ingress in tidal and splash zone of water structures.

Advantages and Properties

- It is a ready to use product and does not require additional usage process.
- Continuously active in all contact with water and during the curing time, filling the capillary cavities in the concrete with nano-sized crystals, providing continuous sealing and shortening the setting time.
- Protects the concrete against negative and positive water pressure
- Water vapor permeable. It allows the building to breath.
- Suitable for bored piled raft insulation.
- Does not need to any additional waterproofing applications.
- Water impermeability ensures breathability.
- Does not harm for human health and environment.
- To repair cracks up to 0,4 mm

Application Details, Suggestions and Warnings

- Shake Hydroplast C well before use..
- Control of the concrete mix design regarding water/concrete ratio $< 0,55$ prior to dosing Hydroplast C
- Hydroplast C must be added into the concrete as the ratio of 2 %
- If prepared in construction yard; Hydroplast C must be added %2 of cement on ready to apply concrete mixture and stirred 5 minutes.
- If prepared in concrete plant; Hydroplast C is added on water then this mixture is added on concrete mixture as last ingredients
- Water impermeability ensures breathability.

- The waterproofing admixtures including HydroPlast C, are not effective against water action with a continuous pressure heads. In such cases, the application of external insulation techniques is recommended.
- Waterproofing admixtures are not effective against water action through the microcracks due to shrinkage, durability problems and excessive loading. To obtain the best performance, reducing the water to cement ratio of mortar / concrete and taking all measures to reduce microcrack formation due to shrinkage are recommended.

Recommended Dosage

If the Water/Cement ratio is $< 0,55$; Hydroplast C is added 2% by the weight of cement on the mixture. Water/Cement ratio should not be up to 0,55.

Technical Properties

Colour and form	White – Liquid
Chemical base	Inorganic compounds
Density (kg/lt)	1.015 – 1.055 (at +20 °C)
pH	3 - 7

Cleaning of Tools

Concreting tools contact with HydroPlast C can be easily cleaned with water.

Packaging

25 kg drum

1000 kg IBC

Storage and Shelf Life

Shelf life of HydroPlast C is 24 months when stored in its original package and recommended storage conditions. HydroPlast C should be stored in dry conditions between +5 °C and +35 °C. It should be protected from direct sunlight and freeze.

Security and Health

In case of contact with skin, wash with clean water. In case of contact with eye, wash with clean water. Eye contact should be medically consulted immediately. For further information please refer to Material Safety Data Sheet (MSDS) of the product.

Legal Liability

The technical recommendations in this product data sheet are based on the experimental studies performed on reference concrete mixtures designed in the R&D laboratories of LYKSOR. The results may not be applicable to different concrete mixtures produced with different materials than the ones used in the experiments in Lyksor. All customers and users are required to determine the appropriate LYKSOR products for their intended use and to test the suitability of LYKSOR product for their application. Please contact LYKSOR for the appropriate product selection and usage details. LYKSOR is not responsible for the improper usage of the products.