BUILDING TRUST

PRODUCT DATA SHEET

SikaControl®-3122 WT

Unique double-action waterproofing liquid admixture, combining crystalline self-healing and hydrophobic pore-blocking action

DESCRIPTION

SikaControl®-3122 WT is a waterproofing liquid admixture having both integral crystalline capillary and hydrophobic pore-blocking functions. It is designed for use in above- & below-grade applications.
SikaControl®-3122 WT consists of various active, proprietary chemicals. These active chemicals react with the by-products of cement hydration to cause a reaction, which generates an insoluble crystalline deposit throughout the pores and capillary tracts of the concrete. Thus, the concrete with SikaControl®-3122 WT reduces water permeability. This product has a self-healing property in the presence of moisture and promotes crack healing.
Suitable to use in hot and tropical climatic conditions.

USES

SikaControl®-3122 WT can be used in all structural concrete that is constantly or intermittently in contact with water such as sea walls, tunnels, basements, structural and pre-cast concrete. SikaControl®-3122 WT can also be used as crystalline waterproofing admixture for cement mortars and plasters.
SikaControl®-3122 WT can be used to enhance the waterproofing properties of structures such as:

- Building basement and foundations
- Sewage and water treatment plants
- Dams, canals, tunnels, harbours
- Tunnel and subway systems
- Water reservoirs
- Concrete pipes
- Parking structures
- Pre-cast, cast-in-place and shotcrete applications
- Swimming pools
- Retaining walls and sea defense walls

FEATURES

- Liquid product facilitates accurate measurement and recording of addition through existing concrete batch plant dispensing system
- Reduces concrete permeability
- Allows concrete to breathe
- Non-toxic
- Becomes an integral part of the concrete
- Reduces penetration of water and other liquids under pressure
- Can seal hairline cracks up to 0,5 mm
- Protects against sewage and industrial wastes
- Added to the concrete at time of batching and therefore, is not subject to climatic restraints

CERTIFICATES AND TEST REPORTS

SikaControl®-3122 WT has CE-marking and Declaration of Performance as Water resisting admixture (Table 9) according to EN 934.02:2009+A1:2012, based on certified type testing and certified Factory Production Control, issued by notified certification body.
SikaControl®-3122 WT is categorized as PRAH within ACI 212.3R-10 “Report on Chemical Admixtures for concrete” (Permeability reducing admixtures)

PRODUCT INFORMATION

Composition	Various active chemicals
Packaging	Pails 20kg, drums 200 kg and IBC containers 1,000 kg
Appearance and colour	Clear to light-yellow liquid
Shelf life	12 months from date of production if stored properly
Storage conditions	Store in undamaged, unopened, original sealed packaging in dry conditions at temperatures between +5 °C and +50 °C.
Density	~1.06 kg/l (+25 °C)
Total chloride ion content	Nil (EN 934)

TECHNICAL INFORMATION

Concreting guidance	Points to remember when producing waterproof concrete: ▪ Ensure water / cement ratio is less than 0.50 ▪ Addition of superplasticiser from the Sikament®, SikaPlast® or Sika® ViscoCrete® range is advised to achieve minimum water/cement ratio ▪ Good concrete practice as per EN 206 standards regarding mixing, placing and curing ▪ Use Sika® Antisol® products as a curing agent or apply wet hessian.
Effect on setting	SikaControl®-3122 WT admixture has minor to no effect on concrete setting time within the recommended dosage range. However, it is recommended to test this in case any additives or blended cementitious combinations are used.

APPLICATION INFORMATION

Recommended dosage	1–2 % by weight of binder. Dosage may vary depending on the mix design, raw materials, climatic conditions and concrete requirements.
Compatibility	SikaControl®-3122 WT is suitable for mixes containing all types of cement and supplementary cementitious materials such as Microsilica (Silica Fume), Fly Ash (PFA), GGBS (Ground Granulated Blast Furnace Slag) and the following Sika products: SikaPlast®, Sika® ViscoCrete®, Sikament®, Plastiment®, SikaPump®, Sika® FerroGard®, SikaFume®, SikaFiber®, Sika® Aer, Sika® Stabilizer, SikaControl® We recommend to perform trial mixes to establish the required performance when combining SikaControl®-3122 WT with the above products or other admixtures. Please consult our Sika Technical Department.
Dispensing	SikaControl®-3122 WT should be added within the recommended dosage. Provide at least 5 minutes of mixing after the addition of SikaControl®-3122 WT admixture to ensure thorough and uniform distribution of the admixture in the concrete mixture.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

IMPORTANT CONSIDERATIONS

- SikaControl®-3122 WT will neither initiate nor promote corrosion of reinforcing steel embedded in concrete, prestressed concrete or concrete placed on galvanized steel floor and roof systems.
- Neither calcium chloride nor any calcium chloride based ingredients are used in the manufacture of SikaControl®-3122 WT. In all concrete applications, SikaControl®-3122 WT will conform to the most stringent or minimum chloride ion limits currently suggested by construction industry standards and practices.
- SikaControl®-3122 WT has minor or no effect on workability of concrete. Prior site trials are advised to assess the effect and any increase or decrease in the workability can be adjusted by adjusting the admixture dosage or amount of water in use.
- It is strongly recommended that concrete should be properly cured, particularly in hot, windy and dry climates.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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