BUILDING TRUST
CONSTRUIRE LA CONFIANCE

PRODUCT DATA SHEET
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Sika® WT-240 P

PERMEABILITY REDUCING ADMIXTURE

Description

Sika® WT-240 P is an integral powdered crystalline-based permeability-reducing admixture (PRA) for use in various watertight concrete applications. As part of Sika's ''White Box Concept'', Sika® WT-240 P may be used for above and below ground structures.

Where to Use

Use of Sika® WT-240 P is recommended but not limited to the following areas.

Civil Engineering & Industrial Applications
- Tunnels
- Subway Stations
- Manholes
- Bridges
- Water Tanks
- Dams and Reservoirs
- Water Treatment Plants
- Secondary Containment Structures

Commercial Construction Applications
- Shopping Centers
- Libraries
- Computer Rooms
- Elevator Pits
- Basements
- Water Parks
- Underground Parking Garages

Residential Applications
- Foundations
- Concrete Basements
- Swimming Pools

Advantages

Sika® WT-240 P is a plant-added, crystalline-based permeability reducing admixture. It uses a unique combination of active ingredients, which react with the moisture within the concrete and with various products of the cement hydration process. This interaction forms insoluble compounds throughout the capillary and air void system in concrete matrix, resulting in the reduced ability of concrete to conduct water flow.

Use of Sika® WT-240 P in watertight concrete application can result in:

- Lower construction cost compared to traditional types of waterproofing
- Simple one-step use results in reduced application time and faster construction process
- Uniform waterproofing throughout the entire concrete volume
- Improved resistance against hydrostatic pressure
- Elimination of risk related to surface damage during construction process
- Ability to seal concrete cracks up to 0.40 mm (0.016 in)
- Easy application due to repulpable bags
- Negligeable effect on concrete workability
- Provides integral waterproofing
- Increase concrete resistance to chemical attacks

Technical Data

Packaging	5.4 kg (12 lb) repulpable bags, 180 bags per pallet.
Appearance / Colour	Powder / Light Grey
Shelf Life	One (1) year when stored unopened in dry warehouse conditions, at temperatures between 5 and 27 °C (40 and 80 °F). Sika® WT-240 P should always be stored at above 8 °C (47 °F). Protect from moisture. Opened containers should be properly sealed to prevent moisture ingress. Product stored in re-sealed containers should be used within three (3) months after opening.

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

HOW TO USE

Dosage

Recommended dosage is 2 % by weight of cementitious materials. Dosage above or below recommended rate can be used. For appropriate dosage rates for your project, contact your local Sika sales representative.

Mixing

To assure homogeneous dispersion and to maximize product performance, it is recommended to add Sika® WT-240 P during the mixing process at the concrete plant. Time of the addition depends on the concrete plant set up.

Central Mix Operations

Add product at recommended dosage into central mixing drum before introducing other mix components. In cases this is not possible due to a plant set up, add Sika® WT-240 P directly into mixing drum of ready mix truck before loading with freshly mixed concrete. Allow for five (5) additional minutes of mixing time after the introduction of all the constituents of the mix in order to ensure an homogeneous dispersion of the Sika WT-240 P in the concrete matrix.

Dry Batch Operations

Add Sika® WT-240 P directly into the drum of the ready mix truck to ensure even distribution of Sika® WT-240 P throughout the entire concrete volume. It is recommended to introduce approximately 50 - 60 % of mixing water to form a slurry. Mix for 2 - 3 minutes before adding the rest of the materials to the ready mix truck according to standard mixing practices.

Precast Operations

Add Sika® WT-240 P either on a coarse aggregate belt or directly into the empty mixer before mixing process starts. To ensure optimum product dispersion throughout the entire concrete volume, do not add product to the freshly mixed concrete at the end of the batching cycle. This may lead to insufficient bag disintegration, lumping, balling and inadequate homogeneity of concrete mixture. Always allow Sika® WT-240 P to thoroughly mix at medium / high speed for at least one (1) minute per cubic yard or a minimum three (3) minutes. Mix for at least five (5) additional minutes at the end of the production cycle in order to ensure an homogeneous dispersion of the admixture in the concrete matrix.

Combination with other admixtures

Sika® WT-240 P can be used as a single admixture or in combination with other admixtures produced by Sika. Please contact your local Sika Canada Technical Sales Representative for further information. Sika® WT-240 P can be used in combination with other supplementary materials. In this case the performance of the actual mix design should be verified to confirm accordance with project specifications. It is recommended to use a high range water reducing admixture from the Sika® Viscocrete® range in order to obtain an optimal concrete workability and to maintain a low w/c ratio.

Clean Up

Use personal protective equipment (chemical resistant goggles / gloves / clothing). Without direct contact, remove spilled or excess product and place in suitable sealed container. Dispose of excess product and container in accordance with applicable environmental regulations.

Limitations

- **Setting Time and Strength:** Sika® WT-240 P is specifically designed to have minimum impact on set time characteristics and concrete compressive strength. Slight retardation of set may occur when Sika® WT-240 P is used in cold weather conditions. Concrete containing Sika® WT-240 P typically does not have negative impact on concrete compressive strength.
- Concrete crack sealing will be effective in non-moving cracks only.
- Proper curing of freshly placed concrete according to ACI 308.1 must be followed.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.

KEEP OUT OF REACH OF CHILDREN
FOR INDUSTRIAL USE ONLY

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