

PRODUCT DATA SHEET

Sika® WT-10

PORE BLOCKING INTEGRAL ADMIXTURE WITH HYDROPHOBIC PROPERTIES FOR WATERTIGHT CONCRETE PRODUCTION

DESCRIPTION

Sika® WT-10 is an integral admixture which greatly reduces the water absorption of concrete through its pore blocking and hydrophobic actions. The incorporation of Sika® WT-10 in the concrete mix ensures its beneficial effects are distributed throughout the matrix, thus enhancing durability. Suitable for use in hot and tropical climatic conditions.

USES

Sika® WT-10 is particularly suited to most concrete structures that are subjected to water pressure and dampness from internal or external sources such as:

- Water retaining structures
- Partially or fully underground structures such as basements, car parks, shelters and other utilities
- Tunnels
- Concrete slabs and foundations

- Concrete swimming pools
- Concrete water tanks
- Reservoirs
- Lift pits
- Marine structures

CHARACTERISTICS / ADVANTAGES

Sika® WT-10 waterproof admixture in concrete has the following advantages:

- Significantly Improves concrete water impermeability
- Improvement in concrete durability
- Prevents ingress of sulfate and carbonation
- Reduces leaching
- Chloride free
- Ammonia free

APPROVALS / CERTIFICATES

Sika® WT-10 follows the requirements of EN 934-2 as a Water Resisting Admixture.

PRODUCT INFORMATION

Composition	Specially selected chemical composition
Packaging	200 L drum, 1000 L flow bin Bulk supply in tanker trucks possible on request
Appearance / Colour	White 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 +45 °C. Protect from direct sunlight and frost.
Density	~1.06 (+25 °C)
Total Chloride Ion Content	Nil (EN 934-2)

TECHNICAL INFORMATION

Concreting Guidance

The standard rules of good concreting practice for production and placing must be observed when using Sika® WT-10 in concrete. Refer to relevant standards.

Fresh concrete must be cured properly especially at high temperatures in order to prevent plastic and drying shrinkage. Use Sika® Antisol® products as a curing agent or apply wet hessian.

Concrete Mix Design

We recommend the following base criteria for design of a concrete mix containing Sika® WT-10:

Minimum binder content: 380 kg/m³ (including PFA, GGBS, and Silicafume)

Water / binder ratio: <0.45

APPLICATION INFORMATION

Recommended Dosage

1.5 - 2.0 % by weight of binder
Higher dosages by weight of binder can be used depending on the mix design, raw materials, climatic conditions and concrete requirements.
Trial mixes must be performed to establish the exact dosage rate required.

Compatibility

Sika® WT-10 may be combined with all types of Portland cement, concretes containing pozzolanic materials such as; GGBS, PFA, micro-silica and the following Sika product ranges / admixtures:
Sika® Plasticisers: Sika® ViscoCrete®, SikaPlast®, Sikament®, Plastiment® SikaFiber®
Sika Aer®, SikaPump®, Sika® FerroGard®-901, Sika® Control-40
We recommend to perform trial mixes to establish the required performance when combining Sika® WT-10 with the above or other admixtures. Please consult our Sika Technical Department.

Dispensing

Sika® WT-10 is added to the gauging water or simultaneously poured with it into the concrete mixer at the batching plant.
Do not add Sika® WT-10 directly to the dry mix.
For optimum utilization we recommend thorough mixing at a minimum wet mixing time of 60 seconds.
The addition of the remaining gauging water (to fine tune concrete consistency) may only be started after two-thirds of the wet mixing time to avoid surplus water in the concrete.

IMPORTANT CONSIDERATIONS

Before pouring suitability tests on the fresh concrete must be carried out.

Take special care that formwork is properly installed and secured.

If frozen and/or if precipitation has occurred, it may only be used after thawing slowly at room temperature and intensive mixing.

When using Sika® WT-10 a suitable concrete mix must be designed for the local material sources and should be trialed.

Sika® WT-10 has no significant water reducing or slump keeping properties.

Sika® WT-10 may lower the strength development of concrete mixes containing secondary and/or tertiary binders.

BASIS OF PRODUCT DATA

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

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

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.

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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ISO 9001: Sika UAE LLC,
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Sika Saudi Arabia Co. Ltd,
Sika Qatar LLC
ISO 14001: Sika UAE LLC,
Sika Gulf B.S.C. (c),
Sika Saudi Arabia Co. Ltd
OHSAS: Sika UAE LLC,
Sika Gulf B.S.C. (c)

All products are supplied
under a management
system certified to conform
to the requirements of the
quality, environmental and
occupational health &
safety standards ISO 9001,
ISO 14001 and OHSAS
18001.

Product Data Sheet

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