

PRODUCT DATA SHEET

Sika® WT-140 L

WATERPROOFING CONCRETE ADMIXTURE FOR CONCRETE AND MORTARS - PART OF THE SIKA® WATERTIGHT CONCRETE CONCEPT



DESCRIPTION

Sika® WT-140 L is liquid waterproofing admixture used for permeability reduction in concrete and cementitious mortars. In combination with Sika® ViscoCrete® and Sika® ViscoFlow® superplasticizers, a concrete with extremely enhanced properties can be produced, regarding its water permeability and its water tightness.

USES

Sika® WT-140 L has been specially formulated for the production of watertight concrete and mortars. It also forms part of the Sika® Watertight Concrete Concept. Types of constructions where it can be used are:

- Building constructions, foundations and wherever waterproofed concrete is required
- Reservoirs and dams
- Underwater constructions
- Pools

For watertight cementitious mortars it can be used in:

- Underground or above ground structures in masonries
- Waterproofing in concrete structures
- Manufacturing of small cementitious parts with a high degree of water resistance and resistance to inclement weather

CHARACTERISTICS / ADVANTAGES

- Reduces water permeability in concrete and cementitious mortars
- Reduces water penetration in concrete and cementitious mortars in combination with Sika® ViscoCrete® and Sika® ViscoFlow® superplasticizers

APPROVALS / CERTIFICATES

CE-marking and Declaration of Performance as Water resisting admixture (Table 9) according to EN EN 934-02:2009, based on certificate of factory production control issued by notified factory production control certification body and type testing.

PRODUCT INFORMATION

Chemical base	Partially neutralized composition of amino alcohols
Packaging	Bulk, IBC, 210 kg drums and in 5 and 20 kg plastic containers
Appearance / Colour	Liquid, pink
Shelf life	12 months from date of production
Storage conditions	Store properly in undamaged unopened, original sealed packaging, in dry conditions at temperatures between +5°C and +35°C. Protect from direct sunlight and frost.
Density	~ 1.02 kg/lit (at +20°C)
pH-Value	8.0-10.0 (at +20°C)
Total Chloride Ion Content	Free (EN 934-01)

TECHNICAL INFORMATION

Concreting Guidance

The standard rules of good concreting practice, concerning production as well as placing, are to be followed. Refer to relevant standards. Fresh concrete must be cured properly.

Production of the main waterproofing layer with Sika® WT-140 L must follow consumption instructions, depending on the mortar's cement content.

Specific Advice

For mortar application: Substrates should be clean and free from oil, grease, old coatings, cement laitance and all loosely adhering particles.

Wash and dampen with water the substrate up to saturation. Remove all standing water from the surface before application.

In the case which bonding layer is necessary, use Sika® ViscoBond® according to the relevant Product Data Sheet. Apply immediately above bonding layer (wet on wet).

Before the application of a mortar prepared with Sika® WT-140 L, concrete must be cured at least for 14 days.

Concrete Mix Design

- For Reduced Permeability Concrete according to the National Greek Regulation for Concrete Technology: Please refer to § B7.6 of the Regulation as applies for specific guidelines regarding the mix design.
- For Sika® Watertight Concrete: Sika® WT-140 L has been designed for all concrete types. In general, adaptation of Sika's suggestions for production of Watertight Concrete, which will have minimum 350 kg/m³ cement and maximum active W/C ratio = 0.45 is recommended. Depending on the specific demands of the mixture for each application, the incorporation of superplasticizer for achieving S3/S4 slump category must be evaluated (EN 206-1).
- For Watertight Mortar: Preferably, use cement of recent production data and washed sand, not sea sand.

APPLICATION INFORMATION

Recommended Dosage

1.5% by weight of cement

Compatibility

Sika® WT-140 L can be combined with the following Sika products:

- Sika® ViscoCrete® superplasticizers
- Sika® ViscoFlow® superplasticizers
- SikaPlast® superplasticizers
- Sika® Plastiment® retarders
- Sikacrete® UCS / Sikacrete® AR silica fume containing products

In all cases, trials are recommended before combining products. Before application, suitability tests must be performed.

Dispensing

- Sika® WT-140 L is added to the gauging water at the plant or on-site into the fresh mixture in the truck.
- Sika® WT-140 L is added into the fresh mortar or to the gauging water.

IMPORTANT CONSIDERATIONS

- When using Sika® WT-140 L a suitable mix design has been taken into account and local material sources should be trialled.
- Sika® WT-140 L should not be added to dry cement.
- Sika® WT-140 L must be added to the gauging water or incorporated in the fresh concrete/mortar mix.
- Use mortar prepared with Sika® WT-140 L as long as it retains its workability.
- Regarding curing of mortar/ concrete prepared with Sika® WT-140 L, the same rules that apply for conventional mortar/concrete are to be followed. Protect mortar prepared with Sika® WT-140 L during its curing phase, especially at summer time or when relative humidity is low.

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.

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.

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.

Sika Hellas ABEE
15 Protomagias Str.
14568 Kryoneri
Attica-Greece
Tel.: +30 210 8160 600
Fax: +30 210 8160 606
www.sika.gr | sika@gr.sika.com



Product Data Sheet
Sika® WT-140 L
October 2018, Version 01.01
021403011000000154

SikaWT-140L-en-GR-(10-2018)-1-1.pdf