

PRODUCT DATA SHEET

SikaControl®-245 WT Liquid

CRYSTALLINE PERMEABILITY REDUCING ADMIXTURE

PRODUCT DESCRIPTION

SikaControl®-245 WT Liquid is an integral liquid crystalline based permeability reducing admixture.

WHERE TO USE

SikaControl®-245 WT Liquid is designed for use in various watertight concrete applications including but not limited to the following structures:

Industrial Applications:

- Tunnels and Subway Stations
- Manholes
- Bridges
- Water Treatment Plants and Water Tanks
- Dams and Reservoirs
- Secondary Containment Structures

Commercial Applications:

- Shopping Centers
- Libraries
- Data Centers and Computer and Server Rooms
- Elevator Pits
- Basements
- Water Parks
- Underground Parking Garages

Residential Applications:

- Foundations and Concrete Basements
- Swimming Pools

SikaControl®-245 WT Liquid can be used in the production of SCC (Self-Consolidating Concrete) and conventional slump concrete, and is effective in concrete containing Portland Limestone Cement (PLC/Type IL) and supplementary cementitious materials.

CHARACTERISTICS / ADVANTAGES

SikaControl®-245 WT Liquid uses a unique combination of active ingredients which react with ingress moisture within concrete. This reaction forms insoluble compounds throughout the capillary system in the concrete matrix resulting in crack healing properties and an improved resistance to water permeability. Additionally, SikaControl®-245 WT Liquid has minimal impact on setting characteristics and strength characteristics.

SikaControl®-245 WT Liquid also provides the following benefits:

- Uniform permeability reduction throughout the treated concrete volume,
- Improved resistance against hydrostatic pressure,
- Ability to seal non-moving concrete cracks up to 0.40 mm (0.016 in),
- Improved durability and service life,
- Lower construction costs compared to traditional types of waterproofing,
- Potentially eliminates the risk of damage to traditional types of waterproofing systems during the construction process.

In addition to the use of SikaControl®-245 WT Liquid it is recommended the concrete is designed for a minimum cementitious content of 350 kg/m³ and a maximum water/cementitious ratio of 0.42. For optimum permeability reduction, proper curing of freshly placed concrete per ACI 308R-01 - Guide to Curing Concrete should be followed.

SikaControl®-245 WT Liquid does not contain intentionally added chlorides.

ENVIRONMENTAL INFORMATION

A Manufacturer Inventory will be available for SikaControl®-245 WT Liquid.

Potentially eliminates need for post-placement applied barrier, compressing the construction schedule and associated carbon footprint. Extends service life.

PRODUCT INFORMATION

Packaging	Available in 208 L (55 gal) drums, 1040 L (275 gal) totes and bulk delivery.
Shelf Life	Shelf life when stored in original packaging in dry warehouse conditions between 5°C and 27°C (40°F and 80°F) is one year from the date of manufacture.
Storage Conditions	SikaControl®-245 WT Liquid should be stored above 5°C (40°F). If frozen, thaw and agitate thoroughly to return to a normal state. Protect from direct sunlight.
Appearance / Colour	Opaque Liquid
Specific Gravity	Approx. 1.130

APPLICATION INFORMATION

Recommended Dosage	<p>The typical dosage rate of SikaControl®-245 WT Liquid is 1% by weight of cement or cementitious materials. The mix water should be reduced by an equivalent amount of SikaControl®-245 WT Liquid used in the concrete. Various factors will affect the dosage rates. Trial mixes with the actual materials should be conducted to determine the required dosage for optimum performance. To the extent specialized materials are used, extreme ambient temperatures are encountered, or for other unusual project conditions, dosage rates outside the typical range may be required. For dosage rates outside the typical range, please contact your local Sika representative.</p>
Mixing	<p>Measure the required quantity manually or by automated dispenser. Add SikaControl®-245 WT Liquid directly into the freshly mixed concrete, or as an integral material in the batching cycle. Do NOT mix with dry cement. SikaControl®-245 WT Liquid may be dispensed on-site directly prior to placement. Care must be taken to mix thoroughly. When used in combination with other admixtures dispense each admixture separately into the mix.</p> <p>Compatibility: SikaControl®-245 WT Liquid can be used in combination with other Sika admixtures and can be successfully used in mix designs utilizing supplementary cementitious materials.</p>

BASIS OF PRODUCT DATA

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.

Always perform test batches to establish mix design and mix properties and performance prior to use.

ENVIRONMENT, HEALTH & SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

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 exact product data and uses.

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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: www.sika.ca

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Product Data Sheet

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