

PRODUCT DATA SHEET

SikaControl®-501 WT

(formerly MSeal 501WA)

Crystalline Waterproofing admixture for Concrete

DESCRIPTION

SikaControl®-501 WT is a corrosion free concrete waterproofing admixture used for the treatment of concrete and concrete products.

SikaControl®-501 WT reacts with the hydration products of cement to form crystals within the pores and capillaries of concrete structures, thereby effectively blocking the passage of water.

Complete waterproofing is normally achieved within 5 – 7 days from final set. After the crystallisation process has successfully waterproofed the concrete the active chemicals of **SikaControl®-501 WT** remain dormant in the concrete. Any subsequent contact with water will reactivate the **SikaControl®-501 WT** sealing process.

USES

SikaControl®-501 WT is a corrosion free concrete waterproofing admixture.

Used for the treatment of concrete and concrete products to protect against:

- Water intrusion
- Leakage and / or cracking
- Chemical attack and corrosion of reinforcing steel.

CHARACTERISTICS / ADVANTAGES

- Provides total and permanent waterproofing properties.
- Protects concrete and reinforcement against corrosive waterborne substances.
- Crystalline action is reactivated by contact with water providing dormant additional protection.
- Effective against both positive and negative pressure.
- Non-toxic or tainting.

PRODUCT INFORMATION

Packaging	SikaControl®-501 WT is supplied in 25kg bags.
Shelf Life	12 months from date of production if stored in unopened and undamaged original sealed containers.
Storage Conditions	Storage at temperatures between 5 °C and 30 °C. Protect from direct sunlight, moisture, frost and contamination.

TECHNICAL INFORMATION

Indicative performance of mortar mix

Concrete properties listed are for guidance and are not a guarantee of performance.

Aspect	Control	SikaControl®-501 WT
W/C Ratio	0.51	0.50
Initial Set	5.50 hours	7.50 hours
Final Set	7.20 hours	9.50 hours
Air	1.50%	1.50%
Slump	100mm	100mm
Compressive Strength	31.5 N/mm ²	36 N/mm ²
Drying Shrinkage (micron)	380	340
Water Permeability	9.5 x 10 ⁻¹³	6.1 x 10 ⁻¹³

The addition of SikaControl®-501 WT will increase the strength of standard concrete over that of a control mix, will reduce the shrinkage, and reduce the permeability of the concrete.

Most other properties remain the same however there is an approximate two-hour delay in the setting time that should be factored into the finishing operations.

Curing Conditions

Concrete containing SikaControl®-501 WT must be prevented from drying out too rapidly and should be kept damp for 5 – 7 days. Mist spraying with water and covering with polythene is effective when drying out would otherwise take place. Protect from weathering, sun, frost and wind for a similar minimum period.

APPLICATION INFORMATION

Recommended Dosage

SikaControl®-501 WT is a dry powder which is added to the concrete at the batch plant at the rate of **1.5% of total cementitious content** up to a **maximum of 6 kg per cubic metre of concrete**.

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.

ECOLOGY HEALTH AND SAFETY

Please refer to the Safety Data Sheet (SDS) for detailed information.

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.

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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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