

# Murasan Hydrotech 883

Hydrophobic admixture for concrete goods



## PRODUCT PROPERTIES

- high performance mass hydrophobic admixture
- reduced risk of water-related damages
- higher resistance against frost and de-icing salts
- improved visual appearance
- efflorescence risk reduction
- enhanced color uniformity and brightness
- improved durability and long-term performance

## AREAS OF APPLICATION

- mineral based materials such as concrete, mortars and screeds
- suitable for higher grade semi-dry concrete goods as well as wet-cast concrete production

## APPLICATION ADVICE

Murasan Hydrotech 883 is as a hydrophobic admixture tailored for the production of high quality semi-dry or wet-cast concrete elements. When incorporated into concrete, Murasan Hydrotech 883 enhances the material's resistance to water penetration, thereby significantly reducing the risk of water-related issues.

During the initial stages of concrete setting and hardening, surplus water not utilized for cement hydration exits the concrete through evaporation. This process leaves a network of interconnected pores and capillaries within the concrete matrix. Just like a sponge, these allow water absorption into the concrete through capillary forces. The presence of liquid water within the concrete structure can lead to various problems like frost damage or secondary efflorescence. Murasan Hydrotech 883 effectively addresses these issues. Its presence increases the water contact angle on the internal surfaces of capillaries and pores, thereby minimizing water absorption. Consequently, the durability and long-term performance of the concrete are significantly enhanced.

For optimal results, Murasan Hydrotech 883 should be added to the concrete mix either with or after the introduction of mixing water. The mixing process should then continue for a minimum of 60 seconds. The precise dosage of Murasan Hydrotech 883 and its compatibility with other admixtures and additives should be determined through preliminary laboratory tests. Please refer to the "General Application Advice: Application of Concrete Admixtures" for further guidance.

The Murasan Hydrotech 883 product line provides three performance levels tailored to your needs. At the same typical dosage, the main differences are as follows:

### **Murasan Hydrotech 883**

Effective for most applications. Provides sufficient protection to minimise the risk of efflorescence and enhance colours. Surface hydrophobicity is present, but eventually some water may wet the surface.

### **Murasan Hydrotech 883 plus**

This version achieves approximately three times the performance of the base Hydrotech 883. The surface has a more visible and longer lasting hydrophobic effect.

### **Murasan Hydrotech 883 ultra**

This product provides the ultimate protection against even slightly pressurised water. The level of surface hydrophobicity and durability is comparable to a dedicated hydrophobic impregnation.

Using this system, it is possible to find the right level of performance at the desired dosage. For example, 1.8% of Murasan Hydrotech 883 will give a similar hydrophobic effect to 0.2% of Murasan Hydrotech 883 ultra. If the admixture dosage is reduced, the mixing time should be increased to ensure proper homogenisation and molecule distribution.

## TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Density	kg/dm <sup>3</sup>	approx. 1	± 0.02 kg/dm <sup>3</sup>
Recommended dosage range	g	2 - 20	per kg cement
Chloride content (maximum)	%	0.1	mass fraction
Alkaline content (maximum)	%	1.5	mass fraction
Type of admixture	Water resisting admixture acc. to EN 934-2: T9		
Designation of admixture	Murasan Hydrotech 883		
Colour	white		
Form	liquid		
In-company production control	EN ISO 9001		
Notified body	Karlsruhe Institute of Technology (KIT), Materials Testing and Research Institute, MPA Karlsruhe, notified body number 0754.		
Certificate of conformity of in-company production control	0754-CPR		
Delivery form	30 kg canister 200 kg drum 1000 kg container		
Storage	Can be stored in cool and dry conditions for at least 12 months in original unopened packs.		
Packaging disposal	Make sure single-use containers are completely empty.		

### Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets.

**Note:** The information in this data sheet must be adapted by the installer, specialist planner, and/or building inspector to the respective construction project, intended use, and specific local conditions. Any non-standard local conditions must be taken into account, and application-specific conditions must be reviewed in advance by the planner/specifier. Deviations from the specified standard conditions require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2500026984]