

# Murasan Hydrotech 883 ultra

Maximum-performance hydrophobic admixture for concrete



## PRODUCT PROPERTIES

- Ultimate water repellency
- Significantly reduced risk of efflorescence and water damage
- Increased resistance to frost and de-icing salts
- Long term durability
- Long-lasting hydrophobic effect
- Improved aesthetic appearance and better defined shapes
- Smoother surface texture with consistent and vibrant colours

## AREAS OF APPLICATION

- Suitable for the production of high quality concrete products from both semi-dry and liquid precast concrete.
- Suitable for use in a variety of cementitious composites including concrete, mortars and screeds

## APPLICATION ADVICE

Murasan Hydrotech 883 ultra is a highly concentrated hydrophobic admixture for the production of high-end semi-dry or wet-cast concrete products. The concrete's resistance to water penetration is improved and the possibility of water related defects is significantly reduced.

As concrete sets and hardens, any water not used for cement hydration evaporates. This creates a network of pores and capillaries that act like a sponge, allowing water to be absorbed into the concrete. Ice and de-icing salts, chemically aggressive substances and aesthetic defects such as efflorescence all have one thing in common - they usually require the presence of liquid water. The risk of all these problems can be greatly reduced by using Murasan Hydrotech 883 ultra. Water absorption is reduced by increasing the water contact angle of the inner walls of pores and capillaries. The durability and long-term performance of the concrete as well as the visual quality of the surface are improved.

Murasan Hydrotech 883 ultra should be added to the concrete mix after the mixing water has been added. Mixing should be continued for at least 60 seconds. Preliminary laboratory tests are recommended to determine the exact dosage and compatibility with other admixtures and additives. 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. 0.94	± 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	waterproofing sealant per EN 934-2: T9		
Designation of admixture	Murasan Hydrotech 883 ultra		
Colour	white		
Certificate of conformity of in-company production control	0754-CPR		
Form	liquid		
In-company production control	EN ISO 9001, EN 934-6		
Notified body	Karlsruhe Institute of Technology (KIT), Materials Testing and Research Institute, MPA Karlsruhe, notified body number 0754.		
Delivery form	30 kg can 200 kg barrel 900 kg container		

**Note:** The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will 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. [2400021777]