

Murasan Hydrotech 883

Hydrophobic admixture for concrete goods



PRODUCT PROPERTIES

- high performance hydrophobic admixture
- reduced risk of water-related damages
- higher resistance against frost and de-icing salt
- improved visual appearance
- efflorescence reduction
- enhanced color uniformity and brightness
- surface texture improvement
- prolonged durability
- improved 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 a hydrophobic admixture designed for production of higher grade semi-dry or wet-cast concrete elements. When treated with Murasan Hydrotech 883, the concrete's resistance against water penetration is improved and the possibility of water-related damages is significantly reduced. By lowering the tendency for water exchange between concrete and environment, the occurrence of efflorescence is also minimized.

When fresh concrete starts to set and harden, any water that is not used for cement hydration exits the concrete through evaporation. This leaves behind a network of interconnected pores and capillaries. Like in a sponge, these subsequently allow water to be sucked into the concrete via capillary forces. Various damage threads can emerge from the presence of liquid water inside the concrete's structure. When water freezes, its volume expands by approximately 9% which can induce up to 200 N/mm² (at -20 °C) of pressure inside the concrete porous system. Liquid water penetrating into the concrete can carry a variety of aggressive chemicals. When water diffuses out of the concrete, it transports water-soluble substances and leaves them on the surface in the form of efflorescence.

All these negative effects can be significantly mitigated by using Murasan Hydrotech 883. During the cement hydration process, the active component of Murasan Hydrotech 883 reacts with the emerging hydration products and activates its hydrophobic effect. By increasing the water contact angle of internal walls of capillaries and pores, water absorption is minimized. Concrete's durability and long-term performance will be significantly improved. At the same time the visual quality of concrete surface is enhanced and its color appear more uniform and vivid.

Murasan Hydrotech 883 is recommended to be added into the concrete mix with or after the addition of mixing water. After that, the mixing should continue for at least 60 seconds. The exact dosage of Murasan Hydrotech 883 as well as its compatibility with other admixtures and additives is recommended to be determined by preliminary laboratory tests.

Please note the "General Information on the Use of Concrete Admixtures

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Density	kg/dm ³	approx. 1	± 0.02 kg/dm ³
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		
Colour Shade	white		
Form	liquid		
In-Company Production Control	EN ISO 9001		
Notified Body	MPA Karlsruhe		
Certificate Of Conformity Of In-Company Production Control	0754-CPR		
Delivery Form	30 kg jerry can 200 kg barrel 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. Ensure compliance with our information leaflet "Return of Emptied Transportation and Sale Packaging". We will be glad to send you this on request.		

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. [2100005410]