

Murasan Hydrotech 14

Compaction aid for concrete goods



PRODUCT PROPERTIES

- Enhanced cement particle distribution during mixing
- Higher compaction degree
- Lower compaction energy consumption
- Better mechanical properties, durability and surface texture
- Improved resistance against frost and de-icing salts

AREAS OF APPLICATION

- Concrete goods from semi-dry (no slump) concrete
- Paving stones, kerbstones, slabs, pipes, manhole shafts, hollow core blocks etc.

APPLICATION ADVICE

Murasan Hydrotech 14 is a compaction aiding admixture based on anionic polyelectrolyte polymers and special additives that improve the compactibility of difficult-to-compact concrete through a combination of physical and chemical surface-tension modifying effects.

Because of better cement particle distribution during the mixing phase, the resulting cement paste has lower inner friction, resulting in better concrete mobility under compaction while not reducing green stability when compaction energy delivery stops. As a result, the concrete compacts more quickly and effectively, resulting in shorter compaction cycles that use less energy and can increase production output. The visual aesthetic quality of the concrete surface is also improved due to better cement paste distribution.

The decreased internal friction of the concrete has a secondary effect of reducing the wear on the moulds, saving money on long-term maintenance costs.

Another advantage of improved cement particle distribution and more compact microstructure is that cement hydration degree may be increased, resulting in stronger cement stone, particularly in transition zones - the point of connection between aggregate particles and cement stone and generally the weakest part of the concrete matrix. This manifests macroscopically as improved mechanical properties and increased durability due to improved resistance to degradation effects such as frost and de-icing salt attack.

The tendency to efflorescence is generally reduced as well.

Murasan Hydrotech 14 should be added to concrete in a quantity determined in a preliminary laboratory test as the final component (after mixing water) or at least with the last part of the mixing water. Do not add to the dry mix! To ensure proper distribution and maximum effect of the admixture, the mixing time after adding Murasan Hydrotech 14 should be at least 60 seconds.

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

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Density	kg/dm ³	approx. 1.19	± 0.03 kg/dm ³
Recommended dosage range	g	2 - 15	per kg cement
Chloride content (maximum)	%	< 0.1	mass fraction
Alkaline content (maximum)	%	< 3.0	mass fraction

All technical values are laboratory results determined at 21°C ±2°C and 50% relative humidity.

Designation of admixture	Murasan Hydrotech 14
Self-monitoring	EN ISO 9001
Colour	brown
Form	liquid
Declaration of performance	EN 934-3
In-company production control	EN 934-6
Notified body	Karlsruher Institut für Technologie (KIT) Materialprüfungs- & Forschungsanstalt, MPA Karlsruhe, Notified Body number: 0754
Certificate of conformity of in-company production control	0754-CPR
Delivery form	200 kg drums, 1000 kg container

Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets. GISCODE : BZM10

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. [2300018400]