

MC-PowerFlow 5104

high-performance superplasticizer based on the newest MC-Polymer-Technology



PRODUCT PROPERTIES

- Good stabilisation at high consistencies
- Fast mixing in concrete
- Low adhesiveness
- Good water-saving
- Good compatibility with air-entraining agent
- Economic dosage
- Long slump retention
- Free of corrosion promoting components

AREAS OF APPLICATION

- Ready mixed concrete
- Concrete with high fluidity
- For combinations with composite-cement
- Self-compacting concrete (SCC)
- Pre-cast elements
- High-performance concrete

APPLICATION ADVICE

MC-PowerFlow 5104 is a synthetic superplasticizer based on the newest MC-Polycarboxylate-technology.

The specific functioning-mechanism makes it possible to produce concrete with extremely low water contents and excellent workability. The desired properties of the fresh concrete can be achieved with moderate dosages.

MC-PowerFlow 5104 has been developed to provide long slump retention. The frequently occurring slump losses with conventional plasticizing admixtures can be reduced considerably in many cases.

An additional dosage of the superplasticizer, for a subsequent correction of the consistency on site is therefore in most cases no longer necessary. In some exceptional cases and depending on the dosage and the temperatures slight retarding side effects may occur.

MC-PowerFlow 5104 is added to the concrete during mixing. It is most effective when added after the addition water. It is also possible to dose it with the added water. The mixing time should be long enough to allow the admixture to unfold its plasticizing effect during mixing.

MC-PowerFlow 5104 requires relatively short mixing times to develop its full plasticizing effect. Therefore, a fast and economic concrete production is possible.

In case of dosage on building site in vehicles of ready-mixed concrete, please follow the corresponding set of rules.

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

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

| Characteristic | Unit | Value | Comments |
|----------------------------|--------------------|--------------|---------------------------|
| Density | kg/dm ³ | approx. 1.06 | ± 0.02 kg/dm ³ |
| Recommended dosage range | g | 2 - 50 | per kg cement |
| Chloride content (maximum) | % | < 0.1 | mass fraction |
| Alkaline content (maximum) | % | < 2.0 | mass fraction |

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

| | |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Self-monitoring | EN ISO 9001 |
| Type of admixture | High range water reducing admixtures/superplasticizing admixture for concrete - EN 934-2:T3.1/3.2 , Water reducing/plasticizing admixture for concrete - EN 934-2:T2 |
| Designation of admixture | MC-PowerFlow 5104 |
| Colour | yellowish brown |
| Form | liquid |
| Notified body | Karlsruher Institut für Technologie (KIT) Materialprüfungs- & Forschungsanstalt, MPA Karlsruhe, Notified Body number: 0754 |
| In-company production control | EN ISO 9001, EN 934-2/6 |
| Colour code of label | yellow/grey |
| Delivery form | 200 kg drums 1,000 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. [2300019835]