# MC-PowerFlow 3104



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

#### **PRODUCT PROPERTIES**

- High-quality concrete surfaces
- Short mixing-time
- Rapid effect
- Above average water-saving
- Economic dosage
- High initial strength
- Minimal adhesiveness
- Free of corrosion promoting components

#### **AREAS OF APPLICATION**

- Pre-cast elements
- Ready-mixed concrete
- High-performance concrete
- Concrete with high flowability
- Self-compacting concrete (SCC)
- Fair-faced concrete
- High-strength concrete
- Concrete with high resistance against aggressive agents

### **APPLICATION ADVICE**

MC-PowerFlow 3104 is a superplasticizer based on the newest MC-Polycarboxylatether-technology. A strong plastification results from a high adsorption rate.

Therefore it is possible to achieve economic dosages. The mixing time is reduced and the dosage can be realized before or after adding water.

The usage of MC-Powerflow 3104 enables over the whole consistency range a stable, not segre- gating concrete. By not changing the water content the possibility of expandation of the consistence over several levels is given.

MC-Powerflow 3104 provides concrete with reduced stickiness, improving the workability and placing.

Despite a well sustained consistence a special reaction mechanism enhances the development of high initial strength. Therefore MC-Powerflow 3104 is suitable for the pre-cast concrete production and the ready-mixed- concrete production as well. It is possible to achieve high quality fair-faced concrete.

The special polymer-combination permits to produce homogenous concrete without segregation. Thereby MC-PowerFlow 3104 can achieve high quality fair-faced concrete.

MC-PowerFlow 3104 can be used in combination with other MC admixtures. In individual cases please contact our concrete technology department for advice.

MC-Powerflow 3104 can be used with several different MC admixtures in concrete.

Using it in ready-mixed concrete it is important in case of construction dosage in vehicle to have a look at the rules.

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

#### **TECHNICAL VALUES & PRODUCT CHARACTERISTICS**

Characteristic	Unit	Value	Comments
Density	kg/dm³	approx. 1.06	± 0.02 kg/dm³
Recommended dosage range	g	2 - 50	per kg cement
Chloride content (maximum)	%	< 0.1	mass fraction
Alkaline content (maximum)	%	< 1.5	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/superplasicizing 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 3104		
Colour	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. [2300019870]