MC-Powerflow 3100

High-Performance Superplasticizer-Based on newest MC-Polymer Technology

Product Properties

- Short mixing time
- Good water reduction
- High initial strength
- Economic dosage
- Reduced setting time
- Intensive dispersion of cement paste
- Minimal adhesiveness
- High quality concrete surfaces
- Free of corrosion promoting components

Areas of Application

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

Application Notes

MC-Powerflow 3100 is a high range water reducer (superplasticizer) based on the newest MC-Polycarboxylatether technology. It is highly adsorbed resulting in high workability.

In addition to the well sustained consistency, MC-Powerflow 3100 depicts a special reaction mechanism that enhances the development of a high initial strength. Therefore, it is suitable for pre-cast and ready-mix concrete production.

Its specific functioning-mechanism makes it possible to produce concrete with extremely low water contents, and excellent workability at economic dosages. The mixing time is reduced noticeably.

MC-Powerflow 3100 allows for the production of homogenous concrete without increasing adhesiveness or segregation. So, placing is easier and faster, and a quality fair-faced concrete is achieved.

MC-Powerflow 3100 requires relatively short mixing times to develop its full plasticizing effect. Therefore, a fast and economic concrete production is possible.

MC-Powerflow 3100 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 3100 features a robustness in application and interaction with all types of cements and cementitious material like PFA, GGBS, silica fume/microsilica, etc.

MC-Powerflow 3100 can be used in combination with other MC products in concrete. It is not compatible with naphthalene sulfonate superplasticizers.

Please note the “General Information on the Use of Concrete Admixtures”.

Technical Data for MC-Powerflow 3100

Characteristic	Unit	Value	Comments
Density	kg/dm^3	approx. 1.07	+/- 0.02
Recommended Dosage	%	0.8 - 3	per kg of cement
Max. chloride content	% per weight	< 0.10	-
Max. alkali content	% per weight	< 1.5	-

Product characteristics for MC-Powerflow 3100

Type of Admixture	Superplasticizer EN 934-2:T 3.1/3.2 (concrete plasticizer EN 934-2: T 2) ASTM C494 Type G
Name of Admixture	MC-Powerflow 3100
Colour	Yellow/Brown
Consistency	Liquid
Internal Production Supervision in accordance with DIN EN ISO 9001 / DIN EN 934-2/6	
Colour Code	grey / yellow
Form of Delivery	20 kg gallons, 200 kg barrels 1,070 kg containers

Property specifications are based on laboratory tests and may vary in practical application. To determine the individual technical suitability, preliminary suitability tests should be carried out under the application conditions.

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

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