



MC-PowerFlow® 1160

New Generation High-Performance Superplasticizers based on the latest Poly Carboxylate Ether (PCE) Technology

Product Properties

- Good water saving
- Excellent fluidity
- Relatively Fast Mixing in Concrete
- Low cohesiveness
- High Early Strength
- High Quality Concrete Surfaces
- Free of corrosion promoting components

Areas of Application

- Self Compacting Concrete
- Precast Elements
- Fairfaced Concrete
- Concrete with high workability
- High Strength/High Performance Concrete
- Ready-Mix Concrete

Application Notes

General

MC-PowerFlow® 1160 is a synthetic superplasticizer based on the newest MC Polycarboxylate-technology. The development of initial strength is enhanced, therefore use of **MC-PowerFlow® 1160** is appropriate for use with precast elements and producing pre-stressed concrete

The specific functioning-mechanism makes it possible to produce concrete with extremely low water contents and excellent workability. The desired properties of fresh concrete can be achieved normally with moderate dosages. **MC-PowerFlow® 1160** requires relatively short mixing times to develop its full plasticizing effect. Therefore, a fast and economic concrete production is possible.

With **MC-PowerFlow® 1160** normally good early strength development is achieved. However, in some exceptional cases and depending on the dosage and the temperatures slight retarding side effects may occur.

The special combination of the active agent permits the production of homogenous concrete of all consistency classes, by which good quality fair-faced concrete can be produced and subsequent cosmetic-putty work can be minimized. With unchanged water content the consistency can be expanded to the highest consistency categories (F5 / F6).

MC-PowerFlow® 1160 is added to the concrete during mixing. It is most effective when added after the additional water. It is also possible to apply it with the added water. The mixing time should be long enough to allow the admixture to unfold its plasticizing effect completely.

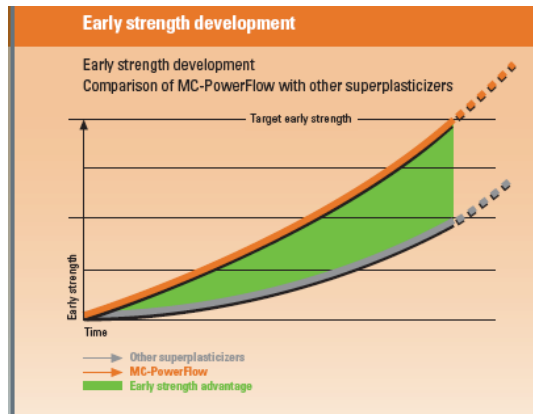
If dosage on construction site into the concrete trucks is necessary, please follow the corresponding rules.

MC PowerFlow® 1160 can also be used in combination with other MC admixtures especially our foaming agent **Centripor SK**. In individual cases please ask for our advisory service for concrete technology. In special cases, slightly retarding versions of the admixture can be provided.

Dosage

MC-PowerFlow® 1160 is generally added between 0.8-2.0% by wt of cement for flow concrete depending on the workability and retardation requirement for individual job site recommended dosage for high early strength is 1.5-3.0% by wt of cement. However it is recommended that site trials be taken to determine optimum dosage. In certain cases due to variations of cement, sand aggregates, weather or site conditions dosages may vary from recommendations.

Further Instructions / Precautions



MC-PowerFlow

- For precast production
- Improved effectiveness compared with standard PCE admixtures through innovative MC polymer technology
- For the production of concrete in any consistency
- Acceleration of the formwork removal cycle because early strength is improved
- Surface improvement
- Highly cost effective because of reduction in the quantities of material required

Technical Data For MC-PowerFlow® 1160

Characteristic	Unit	Value	Comments
Density	Kg/dm ³	Approx. 1.1	-
Recommended Dosage	Gram	2-50	Per Kg of Cement
Max. Chloride Content	% by Weight	< 0.1	-
Max. Alkali Content	% by Weight	< 1.0	-

Product Characteristics for MC-PowerFlow® 1160

Type of Product	PCE Based Superplasticizer
Form	Liquid
Colour	Yellowish to Light Brown
Shelf Life	12 Months from date of Manufacture
Delivery	250 kg Barrels, 30 kg Cans
Storage	In Unopened Packaging. Protect from Rain, Direct Sunlight, Heat and Frost
Disposal	Empty packs completely and dispose off carefully to protect our Environment

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 may 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. E. & O.E.

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