



MC-PowerFlow® 2239

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

Product Properties

- Good water saving and excellent fluidity
- Relatively Fast Mixing in Concrete
- Low cohesiveness
- High Early Strength
- High Quality Concrete Surfaces
- Free of corrosion promoting components
- Good Compatibility with air-entraining and foaming agents
- Good Stabilization at high temperatures

Areas of Application

- Pre-cast Concrete
- Self Compacting Concrete
- Composite Cement mixes
- Concrete with high workability
- Foam Concrete and Foam Mortar
- Can be used with Foam Generator II and Foam Generator III

Application Notes

General

MC- PowerFlow® 2239 is a synthetic superplasticizer based on the latest MC PCE technology. This product is specially formulated for foamed concrete, to ensure stability of foam.

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® 2239** requires relatively short mixing times to develop its full plasticizing effect. Therefore, a fast and economic concrete production is possible.

MC- PowerFlow® 2239 has been developed to provide 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. Many former plasticizing admixtures with long slump retention showed extremely negative retarding side effects.

With **MC- PowerFlow® 2239** 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.

With unchanged water content the consistency can be expanded to the highest consistency categories.

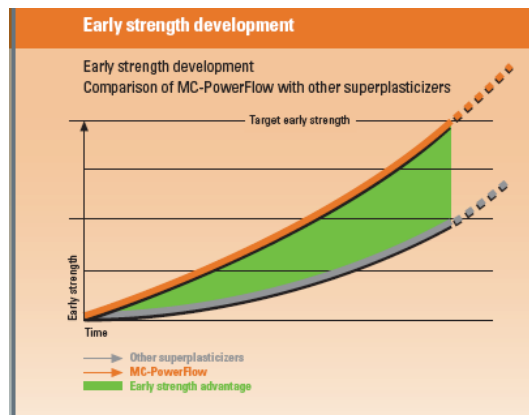
MC-PowerFlow® 2239 is added to the concrete during mixing. It is most effective when added after the additional water.

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

MC PowerFlow® 2239 can be used in combination with other MC admixtures especially our foaming agent **Centripor SK**.

Please note the "General Information on the Use of Concrete Admixtures". To determine the individual technical suitability, preliminary tests should be carried out under application conditions. Dosages may vary from recommendations, based on actual site conditions, materials, temperatures and equipments.

Further Instructions / Precautions



- To determine individual technical suitability, preliminary tests should be carried out under application conditions. We shall be glad to assist you for your concrete technology testing/needs.
- Relevant standards for production, placing and curing of concrete should be followed.
- Efficient curing is essential for any concrete and is best-achieved using **Emcoril**[®] range of curing compound. This will avoid negative effects of quick water loss from the concrete.
- Depending upon the concrete mix severe over dosage of the admixture especially retarding plasticizers and superplasticizers may result in bleeding/segregation of concrete quick loss of workability, extended initial and final setting times etc.
- Slight overdosing may not severely affect the ultimate strength of concrete provided the concrete is properly mixed, handled and placed and adequately compacted and cured.

Technical Data For MC-PowerFlow[®] 2239

Characteristic	Unit	Value	Comments
Density	Kg/dm ³	Approx. 1.05	-
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[®] 2239

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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