



# MC-PowerFlow® 016

## High Performance Retarding Superplasticizer based on Multifunctional PCE Polymers

### Product Properties

- Chloride free
- Non-Toxic and Non-flammable
- Substantial increase of early and final strength
- Improvement in rheological properties
- Substantial amount of water reduction

### Areas of Application

- RMC Concrete
- Batching Plants
- As a retarding super plasticizer for ready-mix concrete
- For structures requiring long slurry retention period
- Concrete with resistance from aggressive agents

### Application Notes

#### General

**MC-Powerflow® 016** is a high range water reducing super plasticizer with slump retention properties especially formulated for concretes designed for medium to higher strengths. The super plasticizer based on selected PCE polymers and additives is free from chlorides and aids concretes in attaining good early and final strengths. The concretes with **MC-Powerflow® 016** are homogenous and free from bleeding and segregation. The super plasticized concretes are pumpable and require minimum compaction

#### Advantages

**MC Powerflow® 016** is suitable for use in ready-mix concrete plants, pre-cast industry, mass concreting, marine and massive structures where retention of slurry is necessary to keep the concrete workable for a longer period. Properly designed concrete produces a very homogenous concrete, which is easily workable without bleeding and segregation

It has high water reduction capacity, which helps in achieving High early strength of the concrete

#### Instruction for Use

**MC-Powerflow® 016** is to be added to the concrete during mixing & should preferably be dosed along with mixing water or additional water. Adding **MC-Powerflow® 016** to the dry aggregate - cement mix is not recommended. It is most effective when dosed after about 80% of the mixing water has been added to concrete.

The mixing time after addition of the admixture should be long enough to allow the admixture to unfold its plasticizing effect completely.

If dosage on the job-site into transit mixer trucks is necessary, please follow corresponding engineering and safety rules.

**MC-Powerflow® 016** can be used in combination with other MC-admixtures, with proper consultation of MC Bauchemie Concrete Technology Team.

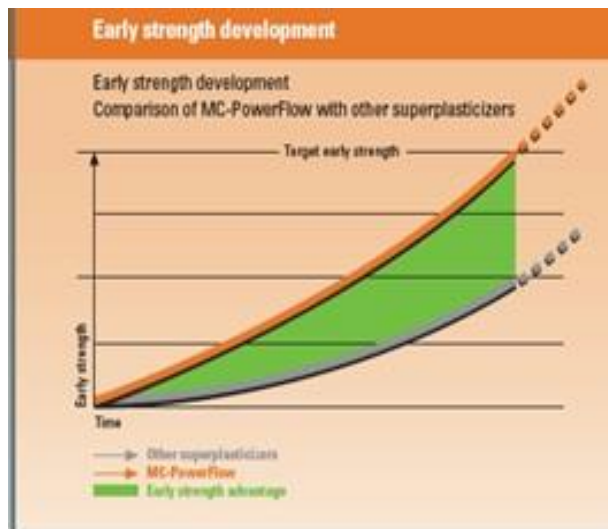
#### Dosage

**MC-Powerflow® 016** is generally added between 0.3-2.0% by weight of cement for flow concrete depending on the workability, water reduction and retardation requirement for individual job site. 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

Please consult MC Engineers for further information and technical support

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 equipment's.

## 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® 016

Characteristic	Unit	Value*	Comments
Density	Kg/dm <sup>3</sup>	Approx. 1.130	±0.03
Recommended Dosage	%	0.3 to 2	As Per weight of Cementitious Compound
PH		>6	
Max. Chloride Content	% by Weight	< 0.1	-
Max. Alkali Content	% by Weight	< 1.0	-

## Product Characteristics for MC-Powerflow® 016

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

### Safety Advice

Please Take notice of the safety information and advice given on the packaging labels, safety information sheets and General Application Advice.

**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 binding if given in written form. The accepted engineering rules must be observed at all times.

**Edition:** - MC/ND/R0/DEC2020, Some Technical Changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.