



MC-Plast RP

Chloride Free Retarding Plasticizer

Product Properties

- Very economical
- Chloride free
- High performance retarding Plasticizer
- Reduction in the required gauging water
- Improve the workability and flow properties of the concrete

Areas of Application

- For site and ready-mix concrete
- For pre-stressed concrete
- Also suitable for reinforced concrete
- Specially formulated for usage in hot climatic conditions

Application Notes

General

MC-Plast RP is a high performance plasticizer with retarding properties. Its addition lowers the surface tension of cement and the mixing water by virtue of which the cement and the aggregate are more effectively soaked. When added to concrete **MC-Plast RP** is absorbed on to cement particles and enables the water in the mix to perform more efficiently.

The addition of **MC-Plast RP** leads to reduction in the required gauging water. It is specially formulated for the usage in hot climatic condition where high workability and retardation is required it is suitable for both site and ready-mix concrete, particularly for pre-stressed and reinforced concrete. **MC-Plast RP** delays the initial hydration of cement, which results in the retardation of the setting time. However once the concrete has undergone initial setting, the hardening process continues normally.

Advantages

- Increases workability and extends setting time minimizing the risk of long distance deliveries in hot weather.
- Increases workability and flow properties.
- Provides retardation hence compaction & casting is made easier particularly in hot climatic conditions.
- Reduces concrete permeability and improves water tightness.
- Higher strength without increase in cement content or reduction in workability.
- Cement saving can be obtained by maintaining original strength and workability.
- Reduce segregation, bleeding, avoids cold joints and helps easy demoulding.

Instructions for Use

MC-Plast RP is to be added to the concrete during mixing & should preferably be dosed along with mixing water or additional

water. Adding **MC-Plast RP** to the dry aggregate/cement mix is not recommended. It is most effective when dosed after about 70% 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-Plast RP is added during the mixing operation by means of suitable dosing devices but may also be added to the gauging water if necessary. The use of **MC-Plast RP** is permissible for synergic effects.

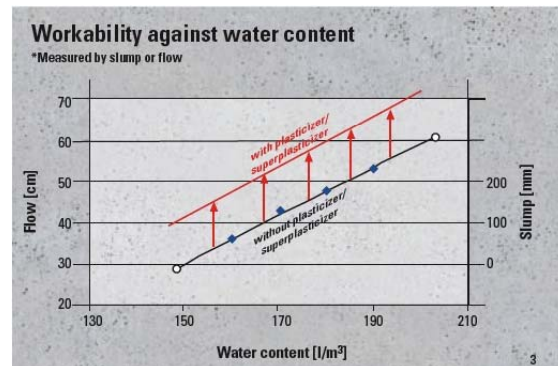
Dosage

Recommended dosage of **MC-Plast RP** is 0.2-1.0% by weight 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. The dosages can be increased above 1% to get added retardation and plasticizing effect in special cases. **MC-Plast RP** can be used in combination with other MC Admixtures.

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 compounds. 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.

Graph Showing Workability of Concrete versus the Water content of the mix with and without use of Superplasticizers



Technical Data For MC-Plast RP

Characteristic	Unit	Value	Comments
Minimum application temperature	°C	20°C	
Mixing ratio	% by weight of cement	0.2 to 1.0%	Depends on application

Product Characteristics for MC-Plast RP

Type of Product	Retarding Superplasticizer
Form	Liquid
Colour	Brown
Shelf Life	12 Months from date of Manufacture
Delivery	230 kg drums and 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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