



MC Erstarrungsbremse K 73

A Universal Retarding Plasticizer

Product Properties

- Chloride free
- Powerful set retarder and Plasticizer
- Helps to dissipate heat of hydration
- Prevent cold joints in monolithic structures

Areas of Application

- Can be used for concretes in hot climate
- Suitable for slip-form construction
- Suitable for bridges, buildings, pre-stressed concrete
- Can also be used for mass concrete & ready mix-concrete

Application Notes

General

MC-Erstarrungsbremse K 73 is a powerful set retarder and plasticizer, formulated for long periods of retardation and is compatible with most of the cement types.

It can particularly be used in concretes for hot climate, for bridges, buildings, pre-stressed concrete work, ready mix and mass concrete. It is very suitable for slip form construction for controlling set retardation.

Advantages

The application of **MC-Erstarrungsbremse K 73** enables successive batches of concrete to set at the same time and prevents cold joints in monolithic structures. For mass concretes the application of **MC-Erstarrungsbremse K 73** will help to dissipate the heat of hydration over long periods and thereby assisting elimination of the thermal cracking.

It also permits transportation of ready-mix concrete over long distances, and allows a longer period of time for placing and compaction of concrete.

MC-Erstarrungsbremse K 73 does not act, as an air entraining agent and its use will increase the 7 and 28 days compressive strength of concrete. After the initial retardation normal hardening of the concrete takes place, which, in comparison to that of conventional concrete, gives a longer workability.

MC-Erstarrungsbremse K 73 does not contain chlorides.

Instructions for Use

MC-Erstarrungsbremse K 73 may be used with all types of cements. It is added during the mixing operations by means of suitable dosing devices but may also be added to the gauging water if necessary. The uses of other **MC- Admixtures** are permissible for synergistic effect.

Dosage

The result of **MC Erstarrungsbremse K 73** can be best assessed after preliminary test on site. This should be carried out using actual cement and aggregates required, in such temperatures that

will be used during the placing, and in accordance to necessary setting time required preliminary trials are required to establish the suitable dosage in individual cases.

As a guide it is recommended that the dosage rates for **MC-Erstarrungsbremse K 73** liquid should be 0.2%-1% by cement weight.

In order to avoid negative results of water evaporation the retarded concrete should afterwards be treated with **Emcoril** curing compounds.

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 or 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.

MC-Erstarrungsbremse K 73 providing workability and set retardation



Technical Data For MC-Erstarrungsbremse K73

Characteristic	Unit	Value	Comments
Density	Grams / cm ³	1.14	± 0.02
Mixing ratio	% By weight of cement	0.2% to 1.0%	Optimum dosage depends on preliminary site trials

Product Characteristics for MC-Erstarrungsbremse K73

Type of Product	Concrete Retarder and Superplasticizer
Form	Liquid
Colour	Transparent to Light Brown
Shelf Life	12 Months from date of Manufacture
Delivery	230 Kg drums and 30 Kg pails
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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