



Viscosity modifying admixture for self-compacting concrete

DESCRIPTION

Viscofluid SCC/10 is an admixture able to increase the viscosity of mixtures, substantially improving stability, homogeneity, and resistance to segregation and bleeding.

TECHNICAL CHARACTERISTICS

Viscofluid SCC/10 is a very important component for the production of Self-Compacting Concrete (SCC), with high stability and absence of segregation and bleeding. Viscofluid SCC/10 does not alter the high deformability obtained by adding admixtures from the Dynamon range and at the same time ensures an increase in concrete cohesion and homogeneity which has practically no segregation. The increase of cohesion of the mixtures is provided by the special characteristics of the organic polymer Viscofluid SCC/10 is made of. The hydrophilic groups interact with water increasing the steric hindrance of the polymer. This reaction modifies the rheology of the concrete and the fact that mixtures are more stable and homogeneous in self-compacting concrete.

Viscofluid SCC/10 allows for:

- increased cohesion and homogeneity of self-compacting concrete eliminating segregation and bleeding, but without altering the mixtures deformability during the fresh state;
- making the rheological properties of self compacting concrete less sensitive to the chemical – physical variations in raw materials (e.g. variation of aggregate size) or small batching discrepancies of the concrete.

COMPATIBILITY WITH OTHER PRODUCTS

Viscofluid SCC/10 is compatible with other products for preparing special self-compacting concrete, especially with:

- cloride-free hardening accelerator admixtures of the Mapefast range to reach high mechanical strength after short curing times, even in cold weather;
- set-retarding admixtures of Mapetard range of products for applications which require a great retention of workability and controlled setting;
- air-entraining agent products of the Mapeair and Mapeair AE range for self-compacting concrete, resistant to freeze-thaw cycles;
- Mapeplast SF powder silica fume-based admixture for self-compacting concrete with high mechanical strength, high impermeability and durability;
- Expancrete expanding agent for shrinkage compensated self-compacting concrete;
- fly ash and limestone filler;
- form-release agents from the Mapeform, Mapeform Eco and DMA ranges for stripping concrete formwork;
- curing agents of the Mapecure range to protect concrete from rapid water evaporation.

CONSUMPTION

Dosage by volume:

from 1 to 2 l per 100 kg of powder (the total fines content provided by cement, supplementary cementitious material and fraction of fine aggregates passing to sieve 0,125).



TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Consistency:	liquid
Colour:	amber
Density at +20°C (g/cm³):	1.02 ± 0.02
Specific action:	improved cohesion reduction of segregation and bleeding
Chlorides:	< 0.1
Classification according to EN 934-2:	viscosity-modifying admixture, table 13
pH:	7.0 ± 1.0
Dry solids content (%):	5.5 ± 0.5
Alkali content:	< 1.0

Different dosages from those suggested must be previously tested through concrete trials, in addition to consulting MAPEI Technical Services Department.

PACKAGING

200 I drums and 1,000 I tanks. Also available in bulk on request.

STORAGE

Viscofluid SCC/10 can be stored for 12 months in original sealed packaging, protected from frost and sunlight.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Viscofluid SCC/10 is not considered dangerous according to the current regulation regarding the classification of mixtures. It is recommended to wear protective gloves and goggles and to take the usual precautions for handling chemicals.

For further and complete information about the safe use of our product please refer to the latest version of our Material Safety Data Sheet. PRODUCT FOR PROFESSIONAL USE.

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com

All relevant references for the product are available upon request and from www.mapei.com

