

PANTARHIT® PC180E (FM)

Item No 0688

High performance superplasticizer acc. to EN 934-2 for precast concrete

Also suitable as concrete plasticizer PANTARHIT® PC180E (BV)

FIELDS OF APPLICATION

PANTARHIT® PC180E (FM) is a high performance superplasticizer which was purposefully designed for concretes having high consistencies and low w/c ratios in precast applications.

The PCE-based superplasticizer enables high early strength developments even at low ambient temperatures and without additional external heat. This might enable reducing the stripping times and can therefore result in a more productive production process.

PANTARHIT® PC180E (FM) has excellent plasticizing effects which do not only increase the workability but also enhance concrete's consistency by several consistency classes e.g. from F1 up to F6 (is equivalent to S1 – S6).

PANTARHIT® PC180E (FM) is particularly suitable for producing self compacting concrete (SCC).

The combination of improved strength development and workability might lead to economical, ecological and technical benefits:

- heated formwork can be removed
- compaction energy can be conserved
- stripping times can be reduced and
- the curing cycle can be optimised

These features can result in a more productive production process.

DOSAGE

Recommended dosage range 0.2 – 2.65 mass-% of the cement content;
is equivalent to 2 – 25 ml per kg cement.

WORKING PRINCIPLE

PANTARHIT® PC180E (FM) improves the cement dispersion within the concrete significantly. This property allows the formation of a homogenous and low-viscosity cement paste which ensures an improved workability and facilitates the compaction of concrete.

Its special built achieves an excellent plasticizing effect and extends the processing time purposefully. Therefore PANTARHIT® PC180E (FM) meets the special requirements challenging the precast concrete industry.

TECHNICAL DATA

Homogeneity	homogenous
Colour	amber
State	liquid
Density	1.07 ± 0.02 g/cm ³
pH-value	5 ± 1
Chloride content	< 0.10 mass.-%
Alkali content (Na ₂ O equivalent)	< 8.5 mass.-%
Workability	from +1 °C
Shelf life	approx. 1 year from date of production if stored properly
Storage conditions	Store in unopened, original sealed packaging between +5 °C and +25 °C. Protect from frost and insolation.

PROCESSING INDICATIONS

PANTARHIT® PC180E (FM) should be added to the ready-mixed concrete.

For the recommended mixing time the definitions and regulations of EN 206-1 apply.

In a truck mixer, the duration of re-mixing after the main mixing process should not be less than 1 min/m³ and not less than 5 minutes after adding the admixture.

This product is not classified as hazardous according to the CLP regulations. See safety data sheet for further information.

PACKAGING

- 30 l can
- 200 l barrel
- 1000 l container
- loose by bulk supply

REMARKS

This information describes the application- and processing possibilities of a product and its operation principles under regular conditions. Having no influence on the further application and processing, especially in conjunction with other construction materials, the given indication are neither a warranty in respect of the product's properties or its fitness for a particular purpose nor a full instruction of use. This information, any other recommendation or verbal advice are not binding and do not infer to any liability or legal demand.

Due to continuous further development, the most recent Technical Data Sheet is valid and will be supplied on request. All orders are accepted subject to our current general terms and conditions.

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SUITABILITY- AND PRE-TESTS ARE NECESSARY BEFORE APPLYING THE CONCRETE ADMIXTURE!