

# PANTARHIT<sup>®</sup> PRC 402

High performance superplasticizer for precast concrete

Item No 0902/D

## FIELDS OF APPLICATION

PANTARHIT<sup>®</sup> PRC 402 is a high performance superplasticizer which was purposefully designed for presenting exceptional improved early strength development in precast concrete.

The PCE-based product has excellent plasticizing effects which are especially suitable for producing self compacting concrete (SCC).

PANTARHIT<sup>®</sup> PRC 402 reduces concrete's water demand significantly, provides it with high workability and good retention properties and facilitates its compaction.

The combination of improved strength development and slump retention 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 unified effects can result in a more productive production process.

#### DOSAGE

The general dosage range is 0.2 - 2.5 mass-% of the cement content.

A significant overdosing of PANTARHIT<sup>®</sup> PRC 402 may lead to an increased workability and to an elongated set retardation of concrete. Using an appropriate curing for concrete the final strength development will not be impaired.

#### STANDARD COMPLIANCE

PANTARHIT<sup>®</sup> PRC 402 conforms to ASTM C494 Type F and BS EN 934-2.

### WORKING PRINCIPLE

PANTARHIT<sup>®</sup> PRC 402 improves the cement dispersion within the concrete significantly. This property allows the formation of a homogenous and low-viscosity cement paste which provides flowable concrete with substantially reduced water content.

The special built of PANTARHIT<sup>®</sup> PRC 402 meets the special requirements challenging the precast concrete industry.

### **TECHNICAL DATA**

Homogeneity	homogenous
Colour	amber
State	liquid
Density	1.09 ± 0.02 g/cm <sup>3</sup>
pH-value	4 ± 1
Chloride content	chloride free acc. to BS EN 934-2
Alkali content (Na <sub>2</sub> O equivalent)	< 8.5 mass-%
Workability	from +1 °C
Shelf life	approx. 1 year from date of production if stored properly
Storage conditions	Store under cover, out of direct sunlight and protect from extremes of temperature.

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### **PROCESSING INDICATIONS**

PANTARHIT<sup>®</sup> PRC 402 should be added to the ready-mixed concrete.

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

#### **COMPATIBILITY**

PANTARHIT<sup>®</sup> PRC 402 is suitable for concrete designs containing OPC or SRC cement, microsilica or silica fume, fly ash (PFA) and ground granulated blast furnace slag (GGBS).

PANTARHIT<sup>®</sup> PRC 402 should not be used in conjunction with any naphthalene based admixture.

When using other Ha-Be admixtures in the same concrete mixture, the products should be added separately and must not be blended prior to addition! Using more than one admixture requires suitability and preliminary tests in order to ensure the required combination of its effects is attained.

### PACKAGING

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

#### **HEALTH & SAFETY**

This product is not classified as hazardous according to the current regulations. Refer to the corresponding Material Safety Data Sheet for further advice.

#### 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 indications 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 PRELIMINARY TESTS ARE NECESSARY BEFORE APPLYING THE CONCRETE ADMIXTURE!

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