

# PANTARHIT® PRC 444

Item No 0890/D

**High performance superplasticizer for high early strength concrete**

## FIELDS OF APPLICATION

PANTARHIT® PRC 444 is a superplasticizer for producing tunnel segments, precast concrete and is suitable for casting the tunnel inner shell.

PANTARHIT® PRC 444 allows the production of stabile concrete that ensures a high workability without segregation and bleeding.

Securing a high early strength development – particularly at very early ages – stripping times in productions may be reduced and the construction processes on site can be improved.

PANTARHIT® PRC 444 may reduce the compaction energy applied to concrete. Concrete manufacturers, contractors and applicators may therefore achieve an economical and technical benefit.

## DOSAGE

The general dosage range is 0.2 – 3.0 mass-% of the cement content.

## STANDARD COMPLIANCE

PANTARHIT® PRC 444 conforms to BS EN 934-2 T3.1 & 3.2. & ASTM C 494 Type F.

## WORKING PRINCIPLE

PANTARHIT® PRC 444 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 compound extends the processing time purposefully and meets the special requirements challenging the tunnel segregation concrete industry.

## TECHNICAL DATA

Homogeneity	homogenous
Colour	yellowish
Chemical base	polycarboxylates
State	liquid
Density	1.10 ± 0.02 g/cm <sup>3</sup>
pH-value	4 ± 1
Chloride content	< 0.10 mass.-%
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.

## PROCESSING INDICATIONS

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PANTARHIT® PRC 444 should be added after or with minimum 70% of water content.

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

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

## COMPATIBILITY

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PANTARHIT® PRC 444 is suitable for concrete designs containing OPC or SRC cement, micro-silica or silica slurry, fly ash (PFA) and ground granulated blast furnace slag (GGBS).

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

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

## REMARKS

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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!**