



# P.T.B.-GROUTMIX CA

Shrink-resistant grout mortar

<b>CE</b>
POLYTECHNISCH BEDRIJF BVBA/SPRL – P.T.B.-COMPAKTUNA® INDUSTRIEPARK ZWIJNAARDE 6 9052 GENT – BELGIUM
13 041/CPR EN 1504-3
<b>P.T.B.-GROUTMIX CA</b>
CC mortel voor niet-structurele herstelling van beton/ Mortier à base de ciment hydraulique (CC) pour la réparation non structurelle du béton/ Mortar based on hydraulic cement (CC) for non-structural repair of concrete structures/ Zementmörtel (CC) zur Instandsetzung (nicht statisch) von Betontragwerken
Druksterkte/Résistance à la compression/Compressive strength/ Druckfestigkeit: class R1
Chloride-ion gehalte/ Teneur en ions chlorure/ Chloride ion content/ Chloridionengehalt : ≤ 0,05%
Hechtsterkte/Adhérence/Adhesive Bond/ Haftvermögen: ≥ 0,8 MPa Gehinderde krimp/ Retrait expansion empêchés/ Restrained shrinkage/expansion/ Behindertes Schwinden/Quellen : NPD
Gevaarlijke stoffen/ Substances dangereuses/ Dangerous substances/ Gefährliche Substanzen : comply with 5.4
Brandklasse/Résistance au feu/ Reaction to fire/ Brandverhalten : A1



## Characteristics



P.T.B.-GROUTMIX CA is a dry, ready-for-use grout mortar on the basis of cement with very good self-running and excellent adhesion properties, appropriate for use both indoors and outdoors.

P.T.B.-GROUTMIX CA consists of cement, different kinds of selected quartz sand and high-quality additives. By simply adding water, one obtains a shrinkresistant grout mortar with a high final strength that bonds perfectly to concrete, mortar and steel. P.T.B.-GROUTMIX CA has shrinkage compensating and fast curing properties, thus allowing the installation or the machine to be taken into service quickly.

P.T.B.-GROUTMIX CA is used for the shrink-free grouting of pylons, rails, sections, anchor bolts, machines. Etc.

TECHNICAL PARAMETERS		Measured values MPa (N/mm <sup>2</sup> )
Compressive strength	after 24 h	ca. 35
	after 7 days	ca. 60
	after 28 days	ca. 70
Flexural strength	after 24 h	ca. 5
	after 7 days	ca. 7
	after 28 days	ca. 8

Mixing ratio	Consumption	Packaging
± 3 to 3,5 l water per bag of 25 kg (± 12 to 14 %)	± 2 kg/mm per m <sup>2</sup>	25 kg PE
Colours	Processing time	Compressive strength
Grey	± 30 min.	after 7 days: ± 60 N/mm <sup>2</sup>

## Directions for use

The application shall be carried out on a non-frozen, clean, well maintained surface free of dust and oil spots and bits of loose substances. Porous surfaces need to be lightly dampened prior to application with a layering of COMPAKTUNA®(PRO)/water solution (1/4) or with P.T.B.-PRIMER.

P.T.B.-GROUTMIX CA is prepared with  $\pm 12$  to 14% of water, this being about  $\pm 3$  to 3,5L of water per 25 kg of product, depending on the desired consistency.

Pour  $\pm 4/5$  of the required quantity in a mortar tub or in a mechanical mixer, and add slowly and steadily the dry grout mortar. Mix everything intensively with a mixer running at a low speed during 5 minutes until a mass without lumps is obtained. Next, add the remaining 1/5 of the amount of water. The grout mortar is then mixed for at least another 3 minutes.

When casting P.T.B.-GROUTMIX CA, work from one side (side or angle) only in order to avoid any inclusion of air. P.T.B.-GROUTMIX CA can be poured, pumped and vibrated.

## Remarks

- Always observe precisely the correct amount of make-up liquid; adding too much water will lead to poor results.
- The maximum thickness of the layer is 4 cm.
- The total layer thickness of P.T.B.-GROUTMIX CA is maximum 4 cm. For layer thicknesses from 4 cm to 8 cm, we advise to mix in 10 kg of boulders of caliber 3 to 8 mm per bag of product, mixing it dry, and mixing the dry mixture with  $\pm 3,5$  L of water. Only use as much water as needed to obtain a lasting homogenous mass.
- The processing temperature is from  $+5^{\circ}\text{C}$  to  $+30^{\circ}\text{C}$  (this applies to the surface as well to the ambient temperature around).
- The best results with P.T.B.-GROUTMIX CA are obtained when the product is applied within 10 minutes after mixing. During cold weather, prepare P.T.B.-GROUTMIX CA with warm water, if necessary.
- P.T.B.-GROUTMIX CA does not contain any chlorides or metal particles but offers excellent protection against corrosion for metal elements due to its alkalinity.
- Protect curing P.T.B.-GROUTMIX CA from freezing, rain, strong winds and direct sunlight.
- During curing, protect P.T.B.-GROUTMIX CA from drying out by covering it with a plastic foil or by regularly keeping it wet with a fine water spray.
- The processing time of P.T.B.-GROUTMIX CA is 30 minutes.
- Cracks, if any, that could appear are only surface cracks and have no adverse effect on the success of the grout job.
- Resistance class: 60 N/mm<sup>2</sup> after 7 days.
- Maximum grain size: 4 mm.

## Packaging

P.T.B.-GROUTMIX CA is available in grey colour in polyethylene bags of 25 kg. The shelf life is 12 months in the original, closed packaging and kept dry.

