



PC-Congrout® 65 GP

High strength, pourable, non-shrink grout for precision grouting of machinery

PC-Congrout® 65 GP is available in a pre-prepared dry powder form, necessitating the addition of a precise quantity of clean water to produce a non-shrinking mortar suitable for applications up to 100 mm in thickness. This high-strength, pourable, non-shrink grout is enriched with specialized additives, offering exceptional properties. It boasts remarkable fluidity without segregation, impressive initial and ultimate strength, excellent adhesion to steel and concrete, resilience to impact and vibration, and minimal water permeability.

ADVANTAGE

- Exhibits resistance to shrinking
- Demonstrates strength
- Easy to apply
- Highly resistant to seawater and sulfates
- Available in liquid or plastic form
- Boasts exceptional shock and vibration resistance
- Features specific pumping properties
- Environmental Product Declaration EPD.
- Excellent moisture tolerance.
- liquid-solid
- Chemical resistant.
- Good inject ability.
- High penetration activity due to low surface tension.

AREAS OF USE

- Sealing shutter tie rod holes
- Applying bridge bearings
- Concrete jacketing for slabs, columns, beams, and footings
- Reblocking, restumping, and void filling applications
- Sealing or filling around pipes in water tanks or swimming pools
- Repairing pile heads
- For grouting requirements between 10 to 100mm, adhere to the bulking process.
- Restoring concrete floors and applying screeds
- Erecting machine and pump plinths

APPLICATION METHODOLOGY

Surface Preparation:

The substrate must be meticulously cleaned to eliminate dirt and remove any loose particles. For steel and concrete surfaces, mechanical etching is necessary to enhance bonding properties. Additionally, it is essential to clean screw holes and mounting pockets to ensure they are free from dirt or debris.

Mixing:

Mechanically blend grout powder with water in the appropriate ratio using an electric drill at a low speed not exceeding 500 rpm to prevent excessive air entrapment. Begin by adding approximately 80 to 90% of the necessary water to the mixing drum, then introduce **PC-Congrout® 65 GP** before incorporating the remaining water.

Mixing should continue for a minimum of 3 minutes.

Working Time:

After mixing, it is recommended to place the material within 15-30 minutes, depending on the ambient temperature and other relevant conditions, to achieve optimal results.

Application:

Water Powder Ratio: W/P: 0.16-0.17

Consistency: Flowable Grout

The amount of clean water needed to attain the desired consistency with a 25kg bag is as follows:

- Pourable: 4 litres
- Flowable: 4.25 litres

Flow Characteristics:

The formwork should be constructed to mitigate leaks. This can be achieved by utilizing suitable materials or by integrating foam rubber strips or mastic sealant beneath and between the formwork joints.

Form Work:

Ensure that the formwork is securely in place and waterproof to prevent any shifting or leakage during the placement and curing processes.

Pouring:

The addition of a controlled amount of clean water produces a free flowing, non-shrink grout for gap thicknesses up to 100mm

Placing:

For thicker sections replace grout with 10mm graded silt free

Working Condition:

Avoid applying grout when the ambient temperature is 5 degrees Celsius. Utilize hot water for increased strength in low temperatures and cold water in high temperatures.

Curing:

Upon completion of the grouting process, it is essential to ensure thorough curing of the exposed grout surfaces. This can be achieved through the application of **PC-Buildcure® WB** White curing membrane or by consistently using water or damp hessian for curing purposes.

HEALTH AND SAFETY

For guidance regarding the safe handling, storage, and disposal of chemical products, users are advised to consult the latest Material Safety Data Sheet, which includes pertinent information on the physical, ecological, toxicological, and safety-related aspects.

CONSIDERATIONS

The minimum application thickness required is 10 mm. For optimal results using **PC-Congrout® 65 GP**, it is recommended to apply a thickness ranging from 20 mm to 100 mm in a single pour. If the thickness surpasses 100 mm, it is essential to implement specific procedures to prevent excessive temperature elevation. Techniques such as incorporating iced water, adding coarse aggregate to the mix (up to 40% by powder weight),

PACKAGING

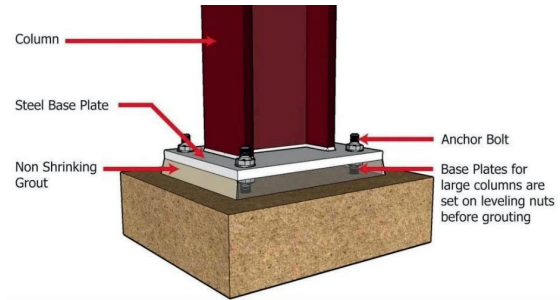
25 Kg bags

SHELF LIFE

9-12 Months from date of Manufacture if stored in Unopened Packaging. Protect from Rain, Direct Sunlight, Heat and Frost

DISPOSAL

Empty packs completely and dispose off carefully to protect our Environment



TECHNICAL DATA

Characteristic	Unit	Standrad	Value
Type			Free flow, non-shrink grout
Form			Gray Powder
Composition			Cement, special additives, and aggregates
Grain Size	mm		0-3.0
Layer thickness	mm		100
Flowability	Flow cone (mm)	ASTM C230/230M	≥ 200
Bulk density	kg/L	ASTM C948	1.15-1.60
Fresh mortar density	kg/m³		2000-2300
Consumption	kg/m³		~1950
Initial set time	minutes		30
Ambient air temperature	°C		5-40
Substrate temperature	°C		5-40
Expansion	%	(ASTM C 1090)	4
Yield	litres		Pourable- 12.6 Flowable- 13.3
Compressive Strength(MPA)	N/mm²	ASTM C 109 With 70.6 mm Cube, at ambient Temperature +30°C	1 day ≥ 25 7 days ≥ 40 28 days ≥ 65
Flexural Strength	N/mm²	After 28 Days as per DIN on 40 x 40 x 160 mm Prisms	> 10
Tensile adhesion strength	N/mm²	(7 days, +30 °C) (28 days, +30 °C) (ASTM C882)	≥ 12 ≥ 2.0
Splitting tensile strength	N/mm²	(ASTM C 496)	≥ 3.5 (28 Days)
Modulus of elasticity in compression	N/mm²	(ASTM C469)	~ 37000
Application Time (Pot Life)	Minutes	5°C 20°C 35°C	60 45 30

All the technical Values were determined in laboratory, at a temperature of 200 C and 65% relative humidity.



PC-WC GLOBAL FZ-LLC

Compass Building, Al Shohada Road Al-
Hamra Industrial Zone-FZ,
Ras Al- Khaimah, UAE
Email : info@pc-wc.com
Phone +971542455817 , www.pc-wc.com

TECHNICAL DATA SHEET UPDATED IN
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TDS/PC-CONGROUT® 65 GP/20

All technical data in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

The information, particularly the recommendations relating to the application and end-use of PC-WC products, are given in good faith based on PC-WC's current knowledge and experience of the products when properly stored, handled and applied under normal conditions by PC-WC recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or any other advice offered. The user must test the product's suitability for the intended application and purpose. PC-WC Global FZ-LLC reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Our technical assistance is at the disposal of the users. Consult the latest update of the technical data sheet on our [website www.pc-wc.com](http://www.pc-wc.com)