KingGrout® PG200

High strength low exothermic pourable epoxy resin grout.

DESCRIPTION

KingGrout PG200 is a three component, high strength, low exothern and free flowing epoxy resin grout. KingGrout PG200 is suitable for grouting large gaps from 10 to 400 mm at high ambient temperatures of up to 55°C.

APPLICATIONS

KingGrout PG200 is ideally designed for use in the following applications:

- Machine base plates.
- Heavy crane rails.
- Bearing plinths.
- Anchoring of steel fixings.
- High speed turbines.
- Grouting areas where occasional chemical spillage may occur.

ADVANTAGES

- Low heat generating grout for large gaps and high ambient temperatures.
- Resistant to dynamic loading.
- Non-shrink and low creep characteristics under continuous loading.
- Exceptional high compressive, flexural and tensile strengths.
- Extremely dense.
- Exceptional bond to concrete and steel surfaces.
- Good chemical resistance.
- High ultimate and early strengths.

METHOD OF USE

Substrate Preparation

- The Substrate should be sound, clean and free from contamination. Surface laitance should be removed by scabbling or grit blasting.
- Steel surfaces should be grit blasted to remove all rust and scale.
- Concrete surfaces should be dry.
- Holes drilled for anchor bolts should be thoroughly cleaned from dust and lose debris using suitable brush or compressed air.

MIXING

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used.

TECHNICAL PROPERTIES @ 35°C:

Compressive strength: BS6319, Part 2 : 1983	≥ 50 MPa @ 3 days ≥ 80 MPa @ 7 days
Flexural strength: BS6319, Part 3 : 1990	≥ 27 MPa @ 7 days
Tensile strength: BS6319, Part 7 : 1985	≥ 12 MPa @ 7 days
Recommended working ambient temperature:	15 - 55°C
Crack formation temperature @ 400 mm:	No cracks or bleeding
Peak exothermic temperature @ 55°C: ASTM D2471	62°C
Peak exothermic time @ 55°C: ASTM D2471	45 min
Gel time @ 55°C: ASTM D2471	150 - 180 min
Water absorption: ASTM C413	< 0.15%
Mixed density:	1.95 ± 0.05 g/cm³
Working life:	3 - 6 hrs @ 25°C 2 - 4 hrs @ 35°C
VOC: ASTM D2369	< 10 g/ltr (complies with LEED)

The entire content of the Hardener pack should be added to the Base pack. Care should be taken to ensure that the bottom and the product sides are thoroughly scraped and used. Mix the two components for 2 minutes. The filler should be gradually added while mixing. Mixing should continue for 3 minutes or until a uniform consistency obtained.

THICKNESSES AND SIZE LIMITATIONS

KingGrout PG200 is suitable for grouting large gaps from 10 to 400 mm. For greater thicknesses, multiple layers can be applied after initial curing of the previous layer.

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PLACING AND FINISHING

Under Base plate:

Enough material should be available to achieve a continuous fill and to complete the work. Pouring of the mixed grout should be started from one side only to avoid air entrapment. To obtain maximum flow distance, a side shutter feed with 100 mm side height should be erected and used to build the required head. At 100 mm of head, a flow distance of 2100 mm can be achieved at gap thicknesses of 40 mm @ 25°C ambient temperatures.

Formwork:

As the mixed grout possesses high fluid characteristics, all formwork and shutters should be water tight. This can be achieved by sealing underneath the formwork and at the joints by using an appropriate mastic.

Notes:

If temperatures are less than 20°C, the cure rate will be slow, but eventually will go to completion if the temperatures remain above 10°C.

CLEANING

All tools should be cleaned immediately after finishing using a suitable epoxy thinner. Hardened materials should be cleaned mechanically.

PACKAGING

KingGrout PG200 is available in 15 kg packs (7.5 litre).

STORAGE

Shelf life is 1 year when stored under cover, out of direct sunlight and protected from extremes of temperature.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult KingKrete's Technical Services Department.

HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local KingKrete representative.

KingKrete Inc. reserves the right to have the true cause of any difficulty determined by accepted test methods.

QUALITY AND CARE

All products originating from KingKrete's manufacturing facilities are manufactured under a management system independently certified to conform to the requirements of the quality standard ISO 9001.

* Properties listed are based on laboratory-controlled tests.

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