



ALCOLIN PERMOCRETE NON-SHRINK GROUT

Description

ALCOLIN PERMOCRETE NON-SHRINK GROUT is a single component, non-shrink, textured, rapid-setting, and high strength cementitious grout which only requires the addition of clean water. It has been specifically formulated for areas of application such as machine and base plates, precast concrete underpinning, brick work repairs, high strength anchoring and general purpose grouting. The specially selected cements, chemical modifiers and aggregates contained in ALCOLIN PERMOCRETE NON-SHRINK GROUT produce a free flowing, rapid-setting grout which has been shrinkage-compensated combined with exceptional adhesion to concrete, steel and masonry materials.



Features & Benefits

- Contains expansive agents which counter the natural shrinkage properties found in cementitious products.
- Rapid-setting, non-segregating, easily pourable product with self levelling characteristics.
- Does not contain any corrosive additives.

Applications

ALCOLIN PERMOCRETE NON-SHRINK GROUT is suitable for the anchoring of machine tools by casting below the machine base, anchor bolts, filling cavities, voids, gaps and recesses, reinforced masonry walls and steel columns.

Adhesion

Excellent adhesion to cement, concrete and steel surfaces especially when used in conjunction with Alcolin Permo-Key Slurry Kit or Alcolin Permocrete 1K Primer.

Limitations

- Do not apply externally when there is a risk of rain or frost within six hours after application.
- Working in direct sunlight, temperatures exceeding 35°C and strong winds will result in premature drying of the product.
- Working in temperatures below 10°C will retard setting.
- Unsound, friable, very porous and contaminated surfaces will result in poor adhesion.
- Do not attempt to rework or tamper with any partially set product.
- Do not apply over structural or movement joints.

Safety instructions

Alcolin Permocrete Non-Shrink Grout is non-toxic, however the cement component is alkali in nature, and it is therefore advisable to wear rubber gloves in order to avoid direct contact with the skin. If product comes into contact with skin or eyes, immediately rinse thoroughly with clean water. Seek medical assistance if irritation or discomfort persists. Keep out of reach of small children. Refer to our SDS for further toxicological information and comprehensive handling instructions.

Surface preparation

- Where applicable, site conditions should comply with the latest SABS Standards editions: SABS 021 (Code of Practice for the Waterproofing of Buildings including damp-proofing and vapour barrier installation), SANS 10109-2:2004 (Concrete Floors Part 2: Finishes to concrete floors).
 - Surfaces must be firm and free of dust, mould, oil, grease, wax polish and organic growth.
 - **Cement-based plaster and screeds** must be at least 2 weeks old and concrete surfaces at least 4 weeks old to avoid excessive movement due to shrinkage.
 - **Painted, Gypsum plastered and Bitumen Coated** surfaces need to be cleaned either chemically or sand blasted (preferable). If chemicals have been used, surfaces should be thoroughly flushed to remove their traces. If compressed air is used for sand blasting, ensure there is no oil contamination.
 - **Smooth surfaces** such as power-floated and off-shutter concrete; any laitance must be roughened or removed by means of sand-blasting or acid washing in order to provide adequate keying. This should be followed by rinsing thoroughly with clean water.
 - Metal surfaces must be free from corrosion and for best results, should be treated with a 2mm coat of Alcolin Permocrete 1K Primer (which contains corrosion inhibitors; see TDS for further information).
- Note:** If there are any doubts about the suitability of the substrate, condition tensile pull off tests should be performed.

Directions for use

1. For very porous, non-primed surfaces, dampen the surface thoroughly before applying ALCOLIN PERMOCRETE NON-SHRINK GROUT, however ensure there is no free standing water remaining.
2. Use a mechanical mixer such as a slow electric drill fitted with a suitable paddle.
3. To form a paste, add approximately 4.5L water and to form a flowable product, add approximately 5L water to a bucket and with continuous stirring, slowly add 20kg of Non-Shrink Grout to the bucket.
4. Mix thoroughly to a fluid type consistency.
5. Allow to stand for approximately 5 minutes.
6. Remix immediately before use.
7. If the mix is a little stiff, a small amount of water can be added to adjust the working properties.
8. Pour ALCOLIN PERMOCRETE NON-SHRINK GROUT from one side only in a continual flow minimizing the formation of air bubbles as well as avoiding any air entrapment in the area of application.
9. It is not necessary to mechanically vibrate the grout. To facilitate the filling of spaces that are difficult to fill, use a wooden or iron bar.
10. Do not exceed the pot life of approximately 30 minutes at 25°C.

Cleaning

Tools can be cleaned with water and soap when the grout is still wet. Allow any unused product to dry before discarding in a suitable container.

Storage stability

Alcolin Permocrete Non-Shrink Grout must be kept in normal, dry conditions and protected from damp. The product has a shelf life of approximately 9 months if stored, as described above, in its original sealed packaging.

Product packaging

20kg bag

Product data

I. Physical data

Type	Cement mixture
Appearance	Textured grey powder
PH	~11 when mixed with water

II. Application data

Pot life	40-60 minutes at 25°C and 50% humidity
Initial set	~4-5 hours at 25°C and 50% humidity
Final set	~6 hours at 25°C and 50% humidity
Typical compressive strength after 28 days	50-55mpa
Typical flexural strength after 28 days	6-7mpa
Wet mix density	~2-2.1kg/L
Yield	20kg bag ~10L
Shrinkage	Up to 7% expansion has been measured in laboratory tests

The above information is only offered, as a guide to the use of this product. Furthermore, users should satisfy themselves that it is suitable for their needs. Since we have no control over the conditions under which it is used, we cannot accept responsibility for problems caused by the use and/or application of this product.

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