

HIGH PRECISION GROUT



VetogROUT CG518

Chloride-free, non-metallic, cementitious, & non-shrink grout

Uses

- To grout precast panels & wall / base segments.
- To repair broken structural concrete elements (in large segments).
- To cast structural members & elements (where conventional grouts can not perform).
- For base plate grouting (where sections are thicker than 25 mm).

Product Description

VetogROUT CG518 is a single-component, cementitious, structural, and non-shrink grout that is ready to use and requires only the addition of water on site. Once mixed, the product can be applied by pouring it into prepared form-work to make demanding structural repairs (It is compatible with most host concrete types). VetogROUT CG518 is composed of a blend of hydraulic cement, carefully selected & graded aggregates, fibers, and special additives to give it its unique properties.

Advantages

- Factory-controlled pre-blend ensures consistently high quality.
- Designed for large thickness grouting & repair work.
- Requires only the addition of water on-site at the time of use.
- Compatible with normal concrete.
- High freeze-thaw resistance.
- Low porosity & Non-shrink characteristics.
- High bond strength.
- Cost-effective.

Standards Compliance

- SASO ASTM C1107

Technical Data

VetogROUT CG518	Typical Values
Pot life (Minutes)	15
Final Setting Time @ 23°C (Hours)	4 Hours
Application Temperature (°C)	5 - 35
Drying Shrinkage (ASTM C157 (Microstrain) @ 7 Days @ 28 Days	< 300 < 500
Water Penetration (DIN 1048) (mm)	< 10
Early Age Height Change (ASTM C827) (%)	+4 (max.)
Temperature Testing Lab Condition (°C)	23
Air Content (ASTM C185) (%)	< 7
Flow-ability (ASTM C1437) (mm)	> 250
Tensile Strength (ASTM C307) (N/mm ²)	2.5
Fresh Wet Density (kg/ltr)	2.2
Maximum Aggregate Size (mm)	2.4
Coefficient of Thermal Expansion	11 x 10 ⁻⁶ m/m per °C
Compressive Strength (ASTM C109) (N/mm ²) @ 1 Days @ 3 Days @ 7 Days @ 28 Days	≥ 25 ≥ 35 ≥ 48 ≥ 65
Flexural Strength (ASTM C348) @ 28 days (N/mm ²)	≥ 5

Usage Instructions

Surface Preparation

The surface should be sound, clean, & free from loose material, grease, laitance, dirt-curing compounds, etc.

Wet the substrate to achieve a saturated and dry surface condition before the application of VetogROUT CG518.

Erect the hopper system and a form-work, make sure that the shuttering is watertight using a polyurethane sealant (such as Vetoflex PU780) or using a rubber gasket seal. This step ensures no leakage of cement paste & water from the shuttering. Contact Saveto's local representative for more technical information, Saveto's grouting detailed method statement, and CAD details.

The base plate must be clean and free from oil, grease, or scale. Air pressure relief holes should be provided to allow venting of any isolated high spots. If leveling shims are used and removed after the grout has hardened, they should be treated with a thin layer of grease.

Unrestrained Surface Area

Generally, the gap width between the perimeter formwork and the plate edge should not exceed 150 mm on the pouring side, and 50 mm on the opposite side. It's recommended to not have a gap at the flank sides.

Mixing

For best results, use a mechanically powered grout mixer. When using quantities up to 50 kg, a slow-speed drill fitted with a high shear mixer is ideal. Larger quantities will require a high-shear vane mixer (Do not use a colloidal impeller mixer).

To enable a continuous grouting operation, it is essential to provide sufficient mixing capacity and labor. It may require the use of a grout holding tank (it's essential to agitate the grout gently).

Add water at a percentage of 11-13.5% of the weight of the grout (This should be accurately measured into the mixer).

Slowly add the entire content of the VetogROUT CG518 bag then mix continuously for 5 minutes. This will ensure that the grout has a smooth, even consistency

Placing

Place the grout within 20 minutes of mixing to gain the full benefit of the expansion process. Place VetogROUT CG518 at a thickness up to 100 mm in a single pour (When used as an under-plate grout).

For thicker sections, it is necessary to fill out VetogROUT CG518 with 30 - 50% of the well-graded & silt-free aggregate -depending on the thickness- to minimize heat build-up (typically 10 mm aggregate is enough).

Any bolt pockets must be grouted before grouting between the substrate & the base plate. (Continuous grout flow is essential). Prepare a sufficient amount of grout before starting & regulate the time taken to pour a batch to the time to prepare the next one. The repair area should not exceed 2.5 m² in a single application.

Curing

When the grouting process is complete, cover exposed areas well with polyethylene sheets to prevent evaporation of the water in the mix for the first 24 hours; later, the grouted area should be cured using clean potable water twice a day for 3 days. Or you can use the Vetocure XT425 (a water-based curing compound after placing the grout).

Cleaning

Remove VetogROUT CG518 from tools and equipment with clean water immediately after use. Remove cured material mechanically.

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Packaging & Coverage

Product	Pack Size	Yield
VetogROUT CG518	25 Kg Bag	12.5 Liters Yield
	50 Kg Bag	25 Liters Yield
Vetobond AB432	4 Liter Can	6 - 8 m ² /Liter
Vetobond EB430	25 Kg Bag	8 m ² /Liter

Stated consumption data are for general guidance. Actual consumption depends on the nature of substrate, method of application, and wastage.

Shelf Life & Storage

The original sealed bag of VetogROUT CG518 has a shelf life of 12 months, provided it is stored clear of ground in a dry and shaded temperature-controlled place (between 5 - 35°C).

Health & Safety

VetogROUT CG518 contains resins (which may cause sensitization via skin contact). Avoid contact with your skin and eyes and do not inhale vapor. Wear suitable protective clothing, gloves, and eye/face protection.

Barrier creams provide additional skin protection.

Should accidental skin contact occur, remove immediately with a resin-removing cream, followed by soap and water. Do not use solvents. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately. Do not induce vomiting. VetogROUT CG518 is non-flammable.

Additional Information

Saveto manufactures a wide range of construction chemicals and specialty products for various applications.

For further information on these products and systems kindly check our website or contact your local Saveto representative.

Saveto also provides various technical information such as CAD details, detailed method statements, specification clauses, application manuals, product selectors and technical support both in contractors and consultants offices as well as construction sites.

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