

HIGH PRECISION GROUT



VetogROUT CG510

Multipurpose, universal, cementitious, non-shrinking grout

Uses

- For grouting & anchoring structural steel & precast concrete members.
- For filling voids & tie-rod holes.
- For under-plate grouting & light machine beds.
- To Anchor a wide range of fixings such as anchor bolts, stanchion bases, masts, and fence posts.

Product Description

VetogROUT CG510 is composed of Portland cement, special aggregates, and shrinkage-controlled, high-performance additives. It is supplied as a dry powder in pre-weighed bags that produce a cohesive mix when mixed with clean water on-site. VetogROUT CG510 is a premium, non-metallic, chloride-free, high-strength product that's designed for grouting & anchoring. It can be applied generally at a thickness of 10 mm to 100 mm as a flowable paste, and at a thickness of 5 - 50 mm as a mortar paste.

Advantages

- Factory-controlled pre-blend ensures consistent high quality.
- Requires only the addition of water on-site at the time of use.
- Chloride-free, High early & ultimate strength, and low permeability (This ensures the durability of the hardened grout).
- Exhibits high physical & mechanical properties.
- Non-shrinkage characteristics.
- Gaseous expansion system compensates for shrinkage and settlement (in plastic state).

Design Considerations

VetogROUT CG510 can be used at a thickness between 10 and 100 mm, and in 3 consistencies: Trowellable, Flowable, and fluid states. You can achieve each one by slightly adjusting water to powder ratio (the quoted values above are based on fluid consistency).

The product's technical properties may vary slightly (positively, in terms of strength) according to the chosen consistency. When grouting under-plates or machine beds, a hopper system is recommended to ensure enough pressure for the grout to flow thoroughly along the desired distance. To avoid cracking, keep unrestrained grout areas to a minimum.

Technical Data

VetogROUT CG510	Typical Values @23°C
Aggregate size (mm)	2.4 max.
Compressive Strength @ Flowable Consistency - ASTM C109 (N/mm ²)	1 day=25.0 3 days=42 7 days=52 28 days=60
Flexural Strength - ASTM C348 @ 28 days (N/mm ²)	6
Pot Life @ 25°C (Minutes)	30
Application temperature (°C)	5 - 35
Final Setting Time - ASTM C953 @ 25 °C (Hours)	4
Early height change - ASTM C827 (%)	+ 2
Length change of hardened (Dry Shrinkage) - ASTM C157 @ 28-days age	<0.0060 (60 macrostrain)
Air content - ASTM C185 (%)	< 7
Flowability - ASTM C1437 (mm)	
0 min	≥ 280
30 min	≥ 260
Fresh Wet Density (kg/Liter)	2.2

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 & surface dry condition before applying VetogROUT CG510.

Erect a hopper system and a form-work, make sure that the shuttering is watertight using a polyurethane sealant (such as Vetoflex PU780) or a rubber gasket seal. This step is important to ensure no cement paste and water leak from the shuttering.

Contact Saveto's local representative for more technical information, the grouting detailed method statement, and CAD details.

The base plate must be clean and free from oil, grease, or scales. Air pressure relief holes should be provided to allow venting of all isolated high spots. If you're using leveling shims, remove them after the grout has hardened. They also 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 is advisable (where practical) to have no gap at the flank sides.

Mixing

For best results, use a mechanically powered grout mixer. For quantities up to 50 kg, use a slow speed drill fitted with a high shear mixer. Larger quantities will require a high shear vane mixer.

Do not use a colloidal impeller mixer. To enable smooth and continuous grouting, a sufficient mixing capacity and labor should be available. The application may require a grout holding tank (it's important to gently agitate the grout). The quantity of water required for each 25kg bag to achieve the desired consistency is:

Trowel	3 - 3.25 Liters
Flow	3.5 - 3.75 Liters
Fluid	4 - 4.5 Liters

Measure the selected water content accurately in the mixer. Slowly add the entire contents of the VetogROUT CG510 bag, while mixing, for 5 minutes. This will ensure that the grout has a smooth, even consistency.

Legal Disclaimer

Saveto endeavors to ensure that any advice, recommendations, information it may give is accurate and correct. It cannot accept any liability either directly or indirectly arising from the use of its products because it has no direct or continuous control over where or how its products are applied, whether or not following any advice, specification, recommendation, or information given by us. Saveto has the right to change any of the technical datasheets specifications upon its discretion without prior notification.

Hard copies of TDSs are printed once or twice a year. Our technical data sheets are continuously updated as per R&D improvements and new 3rd party testing; kindly refer to our website for the latest updated TDSs.

Placing

Place the grout within 30 minutes of mixing to activate the full benefit of the expansion process. VetogROUT CG510 can be placed in thicknesses up to 100 mm in a single pour (when used as an under-plate grout).

To minimize heat build-up in thicker sections, it is necessary to fill out VetogROUT CG510 with well-graded & silt-free aggregate (Typically a 10 mm aggregate works fine). Any bolt pockets must be grouted separately before grouting the area between the substrate and the base plate.

Continuous grout flow is essential. Prepare sufficient grout before starting. Match the time needed to pour to the time needed to prepare the next one.

Curing

Upon completing the grouting process, cover the exposed areas well with polyethylene sheets to prevent evaporation of the mixture water for the first 24 hours.

Later, cure the grouted area using clean water twice a day for 3 days. Or you can use the Vetocure XT425, a water-based curing compound (after placing the grout).

Cleaning

Clean VetogROUT CG510 off all tools with clean water immediately after use. Clean cured materials mechanically.

Packaging & Coverage

Product	Pack Size	Consumption
VetogROUT CG510	25 kg bag	13 liters (Approx.)

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 CG510 has a shelf life of 12 months, provided it is stored clear of ground, in a dry and shaded place at a temperature between 5 & 35°C.

Health & Safety

VetogROUT CG510 is an alkaline and should not come into contact with your skin or eyes. Avoid inhalation of dust during mixing. Wear gloves, goggles, and a dust mask.

If contact with your skin occurs, wash with water. Wash splashes to the eyes immediately with plenty of clean water, and seek medical advice. VetogROUT CG510 is non-flammable.