

MonniGrout CHS

Universal micro-concrete for large thickness repair & grouting

Product Description

MonniGrout CHS is a single component polymer modified fibered cementitious structural and non-shrink micro-concrete that is ready to use and only requires the addition of water on site. Once mixed the product becomes a self compacting micro-concrete that is applied by pouring into prepared form-work for the repair of demanding structural repair while being compatible with host concrete. MonniGrout CHS is composed of a blend of hydraulic cements, carefully selected and graded aggregates, fibers and special additives to give it its unique properties.

Uses

- ▶ Precast panels wall and base segment grouting
- ▶ Repair of broken structural concrete elements where large segments are of concern
- ▶ Casting structural members and elements where conventional grouts can not perform.
- ▶ Base plate grouting where sections are in excess of 70 mm.

Advantages

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

Usage Instructions

Surface Preparation

The surface should be sound, clean, free from loose material, grease, laitance, dirt curing compound, etc. Wet the substrate to achieve a saturated and surface dry condition prior to application of MonniGrout CHS.

Erect hopper system and form-work, make sure that the shuttering is watertight by use of a polyurethane sealant such as **Vetoflex PU780** or a rubber gasket seal. This step is important to insure no cement paste and water leak from the shuttering. Contact your Saveto's local representative for more technical information, Saveto's grouting detailed method statement, and CAD details.

It is essential that the base plate is 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 are to be 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 form-work 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 a mechanically powered grout mixer should be used. When quantities up to 50 kg are used, a slow speed drill fitted with a high shear mixer is suitable. Larger quantities will require a high shear vane mixer. Do not use a colloidal impeller mixer.

To enable the grouting operation to be carried out continuously, it is essential that sufficient mixing capacity and labor are available. The use of a grout holding tank with provision to gently agitate the grout may be required.

Water to be added is 11-13% by weight of the grout and should be accurately measured into the mixer. The total contents of the MonniGrout CHS bag should be slowly added and continuous mixing should take place for 5 minutes. This will ensure that the grout has a smooth even consistency.

Placing

At 25°C place the grout within 20 minutes of mixing to gain full benefit of the expansion process.

MonniGrout CHS can be placed in thicknesses up to 100 mm in a single pour when used as an under-plate grout. For thicker sections it is necessary to fill out MonniGrout CHS with well-graded silt free aggregate to minimize heat build-up. Typically a 10 mm aggregate is suitable. Any bolt pockets must be grouted prior to grouting between the substrate and the base plate. Continuous grout flow is essential. Sufficient grout must be prepared before starting. The time taken to pour a batch must be regulated to the time to prepare the next one.

Curing

On completion of the grouting process, exposed areas should be covered well with polyethylene sheets to prevent evaporation of the water in the mix at least 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 **Vetocure XT425** water based curing compound after placing the grout.

Cleaning

MonniGrout CHS should be removed from tools and equipment with clean water immediately after use. Cured material can be removed mechanically.

use of MonniCure S water based curing compound and wrapping with polyethylene sheets.

Cleaning

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Technical Data

Category	Typical Values
Drying Shrinkage ASTM C157	<300 Microstrain @ 7 d <500 Microstrain @ 28 d
Water Penetration DIN 1048	<10 mm
Fresh Mixed Density	Approximately 2.4 kg/ltr
Maximum Aggregate Size	2.4 mm
Coefficient of Thermal Expansion	11x10 ⁻⁶ m/m per °C
Compressive Strength BS 4551	>65 N/mm ² @ 28 days
Flexural strength BS 4551	>9 @ 28 days.
Tensile Strength BS 4551	>3 MPa @ 28 days
Application Thickness	50 - 500 mm
VOC Content ASTM D2369	<10 gm / Liter (LEED Compliant)
Water Demand	5.5 - 6.5 liter /50 kg bag

All values are subject to 5-10% tolerance

Standards Compliance

- ▶ ASTM C1107/1107M-14 (previously CRD621) as Type B.
- ▶ ASTM C938-10
- ▶ Sampling as per ASTM C943
- ▶ EN 934: 2012 (testing as per EN480, EN 13395)

Packaging & Coverage

Product	Pack Size	Consumption
VetogROUT CG518	25 Kg Bag	11.5 Liters Yield
	50 Kg Bag	23.0 Liters Yield
Vetobond AB432	4 Liter Can	6-8 m ² / Liter
Vetoprime EP310	1 Liter Can	7.5 m ² / Liter
Vetobond EB430	1 Liter Kit	8 m ² / Liter

Shelf Life & Storage

Original sealed kits of MonniGrout CHS has a shelf life of 12 months provided it is stored clear of ground in a dry and shaded temperature controlled place <35°C.

MonniGrout CHS repair area should not exceed 2.5 m² in single application.

Health & Safety

MonniGrout CHS Contains resins which may cause sensitization by skin contact. Avoid contact with skin and eyes and inhalation of 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 solvent. 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.

MonniGrout CHS is non-flammable.

Legal disclaimer

Monneli 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 in accordance with any advice, specification, recommendation or information given by us. Monneli has the right to change any of the specifications mentioned in the Technical data sheets upon its discretion without prior notification. Hard copies of TDSs are printed once or twice a year, while our technical data sheets are continuously being updated as per R&D improvements and new 3rd party testing; kindly refer to our website for the latest updated TDSs.

VER.1.2019