



SOLHYDGROUT GC

Portland Cement, Mineral Aggregate Grout
for General Construction

SOLHYDGROUT GC is a one-component, non-shrinkage grout made from Portland cement and special minerals, designed for general construction applications. It is formulated with fine aggregates to allow for a variable consistency, ranging from plastic to flowable, and is specifically designed to provide high compressive strength. This grout can be applied up to a thickness of 50 mm (2").

■ USES

For use in general purpose commercial, industrial and infrastructure grouting applications.

TYPICAL USES:

- Precast panel grouting
- Columns and machinery baseplates
- Anchor bolts
- Roadway dowel rods
- Concrete voids or cavities
- Pressure grouting of realigned slabs

■ PRODUCT FEATURES

- Meets or exceeds ASTM C-1107-17
- Excellent workability at fluid, flowable and plastic consistencies
- Economical
- Non-shrink, non-bleeding and non-segregating
- Interior and exterior application
- Ready for use with addition of water
- Chloride free
- Can be extended with properly graded aggregate

■ SURFACE PREPARATION

Surfaces in contact with SOLHYDGROUT GC grout must be completely free of oil, grease, laitance and other foreign matter. Roughen the surface to ensure good adhesion to the existing concrete. Clean thoroughly with plenty of water. Preparation must be done mechanically to obtain a Contoured Surface Condition (CSP) of 7 - 9 according to ICRI Guide 310.2. Saturate the surface to be repaired with clean water; remove any standing water before and during work. The surface must be saturated, surface dry (SSD). The concrete must be cured for a minimum of 28 days.

■ PRIMING

No primer required.

■ PRODUCT MIXING

- SOLHYDGROUT GC grout must be vigorously mixed.
- Simply vary the amount of mixing water to obtain the required consistency.
- Pour 4/5 of the amount of clean water provided according to the desired consistency.
- Slowly add SOLHYDGROUT GC while mixing with a mixer at low speed (300 - 450 rpm).
- Add the remaining 1/5 of water until the desired consistency is obtained and mix for 3 minutes.
- Avoid overmixing.
- Only mix the amount of product that can be put in place before the initial setting.

MATERIAL PHYSICAL PROPERTIES @ 25°C (77°F)

| COMPRESSIVE STRENGTH ASTM C-109 cube 50mm x 50mm | | |
|---|----------|-------------|
| Fluid | | |
| 1 day | 21.4 MPa | (3,100 psi) |
| 3 days | 38.3 MPa | (5,550 psi) |
| 7 days | 45.2 MPa | (6,550 psi) |
| 28 days | 53.5 MPa | (7,550 psi) |
| Flowable | | |
| 1 day | 29.7 MPa | (4,300 psi) |
| 3 days | 43.6 MPa | (6,300 psi) |
| 7 days | 51.6 MPa | (7,500 psi) |
| 28 days | 61.4 MPa | (8,900 psi) |
| Plastic | | |
| 1 day | 32.8 MPa | (4,750 psi) |
| 3 days | 50.3 MP | (7,300 psi) |
| 7 days | 60.0 MPa | (8,700 psi) |
| 28 days | 66.9 MPa | (9,700 psi) |

| SET TIME ASTM C-191 | | | |
|---------------------|--------|----------|---------|
| | Fluid | Flowable | Plastic |
| Initiale | 5 h 53 | 4 h 37 | 2 h 15 |
| Finale | 6 h 58 | 5 h 47 | 3 h 45 |

| EXPANSION ASTM C-157 | | | |
|------------------------|---------|----------|---------|
| | Fluid | Flowable | Plastic |
| 3 jours | +0.00 % | +0.003 % | +0.01 % |
| 14 days | +0.01 % | +0.003 % | +0.01 % |
| 28 days | +0.01 % | +0.003 % | +0.00 % |
| Litres (Quarts) | 5.20 | 4.78 | 4.20 |

| RAPID CHLORIDE PERMEABILITY ASTM C-1202 | |
|---|-----------------|
| 28 days | < 1500 coulombs |



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■ PRODUCT APPLICATION

Where formwork is required, it must be firmly fastened and water tight. SOLHYDGROUT GC can be placed in formwork with any consistency.

PLACING

Pour SOLHYDGROUT GC in formwork from one side only to avoid entrapping air. Placement must be done in one continuous operation to eliminate voids and ensure uniform support.

■ CURING

By covering grout with wet burlap for at least 3 days or by applying a curing compound, the curing becomes much more efficient. Machinery or structure can be put back in service as soon as minimal strengths are attained. All exposed grout should be moist cured with wet rags for 3-5 days then followed with 1-2 coats of a membrane curing compound approved by BMQ SOLUTIONS.

■ ESTIMATING / YIELD

One 25 kg (55 lbs) bag of SOLHYDGROUT G.C. when mixed with 5.2 L of clean mixed water will yield approximately 14.2 L (0.46ft³) of mixed grout at a 25 second flow on the cone (ASTM C939-87) at 21°C (70°F). SOLHYDGROUT GC is supplied in 25 kg (55 lbs) kraft paper bags, reinforced with a 1 mil polyethylene inner lining to ensure moisture resistance.

MIXING WATER PER 25 KG (55 LBS) BAG:

| <i>Fluid</i> | <i>Flowable</i> | <i>Plastic</i> |
|--------------|-----------------|----------------|
| 5.20 L | 4.78 L | 4.20 L |

■ PRECAUTIONS / RESTRICTIONS

- Protect from freezing.
- Do not use this product for post-tensioned or pre-stressed cables, bolts or anchors where the stress exceeds 552 MPa (80,000 PSI).
- The recommended optimum temperatures for the foundation, plate and mixed grout, as well as ambient temperatures are between 7°C (45°F) and 32°C (90°F). These temperatures should be maintained for the next 72 hours.
- Do not add limestone-based aggregate.
- For bolt injection, the diameter should be 25 mm (1") larger than the rod diameter.

■ PACKAGING

SOLHYDGROUT GC :

Bags 25 kg (55 lbs)
Qty: 56 bags per pallet

■ RECOMMENDED TOOLS

The following tools will assure a cost effective, satisfactory installation:

- Power drill with "Jiffy" type mixer
- Magnesium or Steel trowel
- Flow Cone
- Grout pump for large volume applications

■ CLEANING

Use water to clean all tools immediately after use.

■ STORAGE

Store in cool dry heated area on skids avoiding all moisture. Can be kept in unopened bags for 18 months.

■ SAFETY

See Material Safety Data Sheet.

Contains Portland cement and silica sand. May irritate eyes and skin. Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water. Avoid breathing dust.

BMQ SOLUTIONS WARRANTS that the product conforms to its chemical description and is reasonably fit for the purpose stated on its Technical Data Sheet when used in accordance with its directions. BMQ Solutions makes NO OTHER WARRANTY either expressed or implied.
Buyer assumes all risk in handling.

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