



# Crocodile GM Grout

## High-Flow, Rapid-Strength Hydraulic Grout



### High-Flow, Rapid-Strength Hydraulic Grout

Crocodile GM Grout is a hydraulic cement grout product with excellent flowability into formwork and voids. It can fill narrow and hard-to-reach spaces without the need for rodding. The product provides exceptionally rapid early compressive strength, achieving over 20 MPa within 2 hours and developing strength greater than 50 MPa in 28 days. It exhibits no bleed water, shrinkage, or cracking after setting.

It is suitable for grouting applications that require excellent flowability, especially in confined areas. Typical uses include large structural and general infrastructure works, grouting under large machine bases with limited clearance from the floor, rail track bases, crack repairs, and honeycombed concrete, etc.

### Product Features

- Excellent flow into formwork and voids without the need for rodding
- Achieves very high early compressive strength, over 20 MPa within 2 hours
- Develops compressive strength greater than 50 MPa at 28 days
- No shrinkage or cracking after setting
- No surface bleed water

### Application Area

- Voids or confined areas requiring excellent grout flow
- Large structural works and general infrastructure applications
- Large machine base grouting
- Rail track base grouting
- Repair of cracks or honeycombed concrete

**Color:** Grey



## Application Instruction

### Surface Preparation:

1. Ensure the substrate is structurally sound.
2. Clean the surface thoroughly with water, removing all loose concrete, oil, and grease.
3. Clean the base plate and bolts, ensuring they are free from oil, deteriorated paint, and grease. Provide adequate ventilation for air flow.
4. Construct formwork securely, ensuring it is robust and sealed against leaks using appropriate sealants. Verify the formwork for leaks before grouting.
5. Pre-soak the grouting area with clean water to achieve a saturated surface dry (SSD) condition. There should be no standing water before pouring the grout. For additional surface preparation guidance, refer to ICRI Guide 310.2R.

### Mixing Ratio:

Water : Product = 15% by weight

3.75 liters of water per 25 kg bag

### Application

1. Ensure the concrete surface is saturated with water but free of standing water at the time of application.
2. Pour the mixed Crocodile GM Grout into the formwork. For optimal performance, complete each pour within 30 minutes and keep the thickness per pour to a maximum of 50 mm.
3. Pour from one side only to prevent air entrapment.
4. Protect the freshly grouted area from vibrations, heat, or rapid temperature changes for the first 24 hours.

### Tool Cleaning

Clean tools and equipment with water immediately after use.

### Estimated Coverage:

- 1 bag (25 kg) of Crocodile GM Grout covers approximately 0.014 m<sup>3</sup>
- 72 bags (25 kg each) of Crocodile GM Grout cover approximately 1.00 m<sup>3</sup>

### Recommendation

- High ambient temperatures will accelerate the product's setting time. In cases of high-water temperature and extreme heat, consider using chilled water for mixing.
- Do not exceed the recommended water content. Excessive water will lead to reduced mechanical properties (e.g., lower compressive and flexural strength) and increased shrinkage.
- Before application, ensure the substrate is strong and prepared according to specified standards.
- Each pour of Crocodile GM Grout must have a minimum thickness of 10 mm.
- After pouring, cure the grout surface with water for at least 3-7 days.
- Crocodile GM Grout is a rapid strength developing product and is sensitive to moisture. High moisture during storage can shorten the product's shelf life.
- Recommended operating temperature: between 5°C and 35°C



**Technical Data**

Test Method	Standard Value	Testing Method	Evaluation
Working time	-	In house	30 minutes
Flowability			
Initial	$\geq 360$ mm	ASTM C1437	$\geq 360$ mm
30 Minutes	$\geq 300$ mm	ASTM C1437	$\geq 300$ mm
Setting time			
Initial		ASTM C191-99	~ 52 minutes
Final		ASTM C191-99	~ 70 minutes
Compressive strength			
2 hours	$\geq 20$ MPa	BS 1881	$\geq 20$ MPa
1 day	$\geq 40$ MPa	BS 1881	$\geq 40$ MPa
28 days	$\geq 50$ MPa	BS 1881	$\geq 50$ MPa
Flexural strength			
1 day	$\geq 10$ MPa	ASTM C348	$\geq 10$ MPa
Change in Height at Early Age	$\geq 0.2\%$	ASTM C827/C827M	0% to +4%
Drying shrinkage			
28 days	0%	ASTM C157	0 %
Modulus of elasticity			
28 days	$\geq 30$ GPa	ASTM C469	$\geq 30$ GPa
Bleeding rate	0 %	ASTM C232/C232M	0 %
Chloride ion	$\leq 0.1\%$	ASTM C1152	$\leq 0.1\%$

*This product complies with the standards GB/T50448-2015, TB/T2331-2013, TB/T3320-2013, and JJT/1130-2017.*

*Remark: The above evaluations are from the laboratory; actual installation might provide different results according to the condition of workplaces.*



### **Caution**

- Always wear appropriate personal protective equipment (PPE) such as gloves, dust mask, safety glasses, etc.
- Use in well-ventilated areas. Avoid inhaling dust.
- In case of eye contact, immediately flush eyes with plenty of clean water and seek medical attention.
- Keep out of reach of children.

### **Storage**

- Store in a cool, dry, and shaded place at temperatures between 0 - 35°C.
- Avoid direct sunlight.
- Product shelf life is 6 months from the manufacturing date.

### **Packaging**

Net Weight: 25 kg/bag

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