



Multicrete Sub Zero Grout

Technical Data Sheet

Specially designed for cold temperatures

Product Description

Multicrete Sub Zero Grout is hydraulic cement -based, non-ferrous, un-sanded grout. This specially formulated grout features reliability and high performance for grouting purposes in cold temperatures.

Uses

Low temperature grouting -10°C to +5°C
(14° F to 41° F)

- Grouting anchors or cable bolts requiring rapid tensioning
- Provides high early strength for anchors to allow quick "cycle" time
- Patching high traffic areas that require minimal disruption
- Grouting earth tie-back anchors into porous soil where there is a flow into drill holes

Technical Data

All test results are based off the maximum water content stated in the mixing instructions. Product technical properties are derived through batching and testing performed under laboratory conditions.

Packaging:	20 kg
Density:	1765 kg/m ³
Yield:	0.4 ft ³
Mixing Time:	180 seconds

Set Times

Initial Set: 15	Final Set: 30
Flow Cone: 32 seconds	

Compressive Strength

	At 23°C	At -5°C	At -15°C
24 Hours			
7 Days			
28 Days			

Features and Advantages

This product can be used in applications where the substrate temperature can range from -10°C to +5°C
(14° F to 41° F)

- Non-bleeding
- Non-segregation
- Precision non-shrink
- Multicrete Sub Zero Grout achieves strength of 15 MPa (Over 2000 PSI) in 2-3 hours, making it ideal for grouting in water-laden areas that require rapid strength gain

Mixing

Recommended use with mechanical mixer with paddles. A 40-60 RPM mixer is required to achieve max pot life.

- Product must remain dry prior to mixing
- Use 7-8 litres of potable water per 20 kg bag
- Ideally the dry product and water will be 17- 22°C prior to mixing. The wet mix temperature must initially be 17-22° c. Ideal mix temperature is 20°C

Limitations

Adhering to recommended water additions is very important. Exceeding the maximum recommended water content per sack will result in inferior physical properties

Note:

Sub Zero mixed grout will remain fluid and pumpable 15 minutes from the addition of water to the mixture. This grout must remain agitated as much as possible, continuous mixing will keep the grout at a fluid state up to 30 minutes. Once the grout has aged 15 minutes, it is essential to remain agitated until ready to pump. Static state will begin to set after 5 minutes.



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Multicrete Sub Zero Grout is packaged in 20 kg heavy-duty polyethylene-lined bags. Each bag yields approximately 0.46 cubic feet of grout (13 L). All Multicrete Sub Zero Grout packaged materials can be custom packaged to meet specific project requirements

Handling & Storage

Avoid formation of respirable particles when handling Multicrete Sub Zero Grout and all other Multicrete materials. Avoid exceeding the given occupational limits.

Always follow standard hygiene when handling chemical products. When storing chemical products keep material stored in their original container, keep well ventilated, dry, and observe label precautions when handling and storing. Make sure stored products are in accordance with local regulations.

Safety Precautions

Multicrete Sub Zero Grout contains Portland cement and carefully selected additives. Freshly mixed materials may cause skin irritation. Avoid direct contact and wash exposed areas promptly with water. If any cementitious material gets into eyes, rinse immediately and repeatedly with water and seek medical attention. Normal safety wear such as dust masks, rubber gloves and safety glasses needed to handle conventional cement-based products should be worn.