

MINING

Capcem™ 4/4 F Pumpable Grout

ENCAPSULATED CEMENTITIOUS PUMPABLE GROUT

DESCRIPTION

Capcem™ 4/4 F Pumpable Grout is supplied as a ready to use dry powder encapsulated in a water permeable skin, 2 or 3 capsules per bag. When required for use, the capsules are soaked in water, which is absorbed through the skin, to form a thixotropic non-shrink grout which has a fast rate of strength gain. The capsules are best used with a purpose-made SS1 Grout Pump. Optionally, the grout can be supplied in 10 kg bulk bags for manual mixing.



APPLICATION AND USE

For fast grouting of rock anchors, particularly of overhead roof bolts as encountered in mining and tunnelling applications, where rapid strength development is required, and where rock temperature may exceed 35°C.

ADVANTAGES

- Encapsulated
 - Controlled water: powder ratio
 - Eliminates mixing equipment
 - Minimal wastage of grout
- Non-shrink - Expansion agents counteract shrinkage and ensure effective contact between bar and grout
- Chloride free - Rapid strength development without the use of chlorides ensures absence of corrosion
- Thixotropic - No loss of grout even from overhead holes, due to the thixotropic nature of the grout

TECHNICAL DATA

GROUT PERFORMANCE (TYPICAL) AT 30°C

Parameter	Value (minimum)	Unit
Pump Life	31	minutes
Grout Set Time	34	minutes

PULL STRENGTH ON 250MM BOND

Curing Age	Value	Unit
1 Hour	4.4	tonnes
4 Hours	7.0	tonnes
24 Hours	9.0	tonnes

APPLICATION METHOD

The required number of Capcem™ 4/4 F Pumpable Grout capsules are removed from their packaging and soaked in clean water for a minimum of 5 minutes then removed from the water and the grout emptied into the Pump. For optimum results it is recommended that the capsule be used immediately after soaking. For full application instructions, refer to the data sheet of the specified Minova Pump.

Alternatively, the grout may be mixed with the correct volume of water (2.6 l per 10 kg bag).

SAFETY INSTRUCTIONS AND LIMITATIONS

It must be noted that rock temperatures will influence rate of set and strength gain; the higher the temperature within the recommended rock temperature range, the faster the set and more rapid the strength gain.

Capcem™ 4/4 F Pumpable Grout capsules are non-toxic, but like all cements, is alkaline in nature. The use of gloves and goggles is recommended. Splashes should be removed from skin and eyes by washing with plenty of clean water. In the case of splashes in the eyes, medical attention should be sought immediately. Refer to Material Safety Data Sheet.

PACKAGING AND TRANSPORTATION

Capcem™ 4/4 F Pumpable Grout capsules are available in soakable capsules or bulk packed for direct mixing with water.

Packaging	Capsule mass	Caps / bag	Wetted Yield (l)
90 mm x 480 mm capsules	4 kg	2	4.2
65 mm x 430 mm capsules	3 kg	3	3.3
10 kg bag	-	-	5.2

STORAGE AND SHELF LIFE

Capcem™ 4/4 F Pumpable Grout capsules have a shelf life of 12 months when stored in cool, dry conditions in the original packaging.

DISPOSAL

Follow local regulations.

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