

CEMENT BASED CAPSULE FOR ROCK STABILISATION

Description

CONCAP C is available in sausage form enclosed in perforated plastic pouch. At the time of application, the capsule is put in water, allowing enough water to percolate in through the perforations to form a nonshrink, thixotropic cementitious grout.

Special additives in the formulation ensure controlled expansion to stabilise the grout and control the water uptake to provide an optimum w/c ratio.

Uses

CONCAP C is used for grouting rock bolts for strata reinforcement in tunnelling and mining to reduce roof collapses.

Advantages

- Reliability : laboratory tested pre-packed materials remove all problems of controlling grout mixing underground thereby reducing any risk in constructing a fully column grouted bolt
- Non-shrink : controlled expansion counteracts shrinkage to provide effective contact with rock
- Chloride free : develops early strength without the use of chloride and makes it safe to use with embedded steel Encapsulated
- Thixotropic : minimises grout loss from overhead holes

Characteristics

Chemical base: Special cement

Appearance: Powder

Colour: Grey

Compressive strength(ASTM C109):

1 day	≥10 N/mm ²
7 days	≥20 N/mm ²
28 days	≥28 N/mm ²

Setting time(30°C):

Initial :	3-8 mint
Final :	10-20 mint

Application Instruction

APPLICATION METHOD / TOOLS

MIXING

Minimum water soaking time - 3 minutes

Maximum water soaking time - 4 minutes

Using the correct bit diameter, the holes should be drilled to the recommended depth using a rotary percussive machine; bore holes prior to insertion of CONCAP C capsules should preferably be cleaned with compressed air to ensure total elimination of foreign particles, rock dust or water that may otherwise remain inside the bore hole.

The number of CONCAP C needed should be taken out of their package and put in a trough of water. The CONCAP C needs to be soaked for at least 3 minutes to allow sufficient water uptake. It may need to be soaked for longer if signs of air release (bubbling from the cartridges) are still there. The capsules are to be taken out of the water and inserted into the drilled hole. The capsules must be pushed to the end of the hole and put in position by a stemming rod or some such instrument. All the capsules are to be inserted in the same way. The rock bolt has to be pushed into the hole as far as it would go.

Limitation

Capsules should not be inserted in the borehole in running water condition.

Packaging

32 mm dia x 300 mm length (20 pcs in a box)

Shelf Life

6 months from date of production

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Storage and Shelf life

Store properly in dry condition in undamaged and unopened original sealed packaging between 5 - 30°C away from direct sunlight. Storage at lower temperatures such as in cool rooms is highly recommended and will extend the shelf life. Stock rotation is strongly recommended. When using cool room storage the resin capsules should be allowed time to attain ambient temperature before use otherwise SPIN and HOLD TIMES will be extended.

Safety Precautions

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data..

Note

All Technical Data Sheets are updated on regular basis; it is the user's responsibility, to obtain the most recent issue.

Field services where provided, does not constitute supervisory responsibility, for additional information contact our local FIRSTCHOICE SPECIALITY CHEMICALS PRIVATE LIMITED representative.

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