

SAFE-T-GROUT 10 & 11

A Pumpable and Rock Support Non Shrink Grout

Description

SAFE - T - GROUT 10 is a non shrink grout especially formulated as a fluid and highly pumpable grout for the anchoring of roof bolts and void filling.

SAFE - T - GROUT 10 is a pre-mixed dry powder composed of blended cements, shrinkage compensating chemicals and plasticizing agents. It is non-toxic and has no added chlorides or nitrates.

Typical Applications

- * Mining rock support
- * Grouting of anchor bolts
- * Tunneling
- * Cavity filling in pipes and concrete members

Advantages

- * Highly pumpable through very small orifices.
- * Excellent bonding characteristics
- * Easy application
- * Non-shrink
- * Thixotropic action - No volume loss or slumping of grout from overhead holes.
- * Pre-mixed -eliminates mix selection problems and therefore reduces risk offailures.
- * Extended Pot life.

Directions for Use

- * Add 4 litres of water per 10kg bag of SAFE- GROUT 10.
- * Mix contents with a mechanical mixer until a smooth lump free pumpable mortar is obtained.
- * Use a positive or piston type pump to achieve optimum results.
- * When pumping over long distances it is necessary to create weep holes in the element to allow air to escape.
- * Over extended distances it is sometimes necessary to create a number of pump stations to ensure full void filling of the cavity is achieved.
- * In the case of mechanical bolt anchoring systems, the grout can be pumped through the "eye" of the back washer of the bolt, using the narrow barrel through the "eye" or up the side of the bolt to the back of the hole. Slowly start pumping and at the same time slowly extract the fill line from the hole.
- * Bond pull-out tests can be carried out after 24 hours to check the bond strength.

Where not to use:

- * In areas where early strengths are required -1 and 4 hours in this case we would recommend the MULTI GROUT CEM 60 range of products.
- * In areas where acidic environments and other materials which seriously and rapid attack Ordinary Portland Cement.

Typical Properties

Compressive Strengths MPa - the strength development of SAFE - T - GROUT 10 is dependant upon the cement/water ratio as well as the ambient temperatures. The lower the water content the higher the strengths.

A Compressive Strengths (Mpa)

AGE-DAYSCOMPRESSIVE STRENGTHS- MPa 25° C

1 Day	3-4
3 Days	8-12
7 Days	18-22
28 Days	25 - 30

B Bond pull-out strengths -(TONS)@25° C

The bond pull-out strengths on a 200mm x 16mm diameter ribbed bar is as follows:

AGE-DAYS BOND PULL-OUT (TONS)

8 Hours	1,4 - 1,8
1 Day	4,0 - 6,0
3 Days	8,0 - 10,0
7 Days	+10
28 Days	+10

Yield

One 10Kg bag of Safe - T -+Grout 10 mixed with 4 Litres of water will yield ±8 litres offluid grout.

Packaging

SAFE - T - GROUT 10 is packed in 10kg woven polypropylene bags with polythene inner liners.

Quality Assurance

MCC LIMPOPO's production and testing programmes comply with local and international standards.

Updates

This data sheet supersedes all previous issues prior to this date: 25/02/2015