

MYK GROUT M-50

Free flow Non-shrink expansive grout

Technical Data Sheet

Product Description:

MYK Grout M-50 is recommended for precision grouting where it is essential to with stand static load and typical applications like base plates of turbine, Generators, compressors, boilers etc. it is basically a free flow non shrink high strength expansive, grout. It is based on port land cement with graded aggregated and additives which impart controlled expansion in the plastic state. The non shrink grout function is three folds, to fill the voids between the base plate and the concrete foundations completely and permanently without shrinkage or separating from either to transfer all loads from the base plate to the concrete foundation and to maintain precise alignment. It effectively transfers all operational loads to the foundation.

Advantages:

- Develops very high early and final strengths
- Non-shrink: basically a non-shrink material occupies the filled space without shrinkage
- Prepacked, factory blended
- Non-metallic Free flow: it has excellent flow characteristics and has positive expansion during setting and ensures high level contact with bond area
- Chloride free: it is basically a chloride free material and does not affect the steel or foundation bolts.

Technical Data:

Compressive strength: (BS 1881- part 116: 1983)

| Age/ Days | Compressive Strength in N/mm ² W/P 0.18 | |
|-----------|---|----|
| 1 Day | Minimum | 15 |
| 3Days | Minimum | 30 |
| 7 days | Minimum | 40 |
| 28 Days | Minimum | 50 |

Note: Cubes Size of the cubes used 70.6mm x 70.6mm x 70.6mm tested at 30°C.

Flexural Strength at 30° C: BS 4551/1998

| Age/ Days | Flexural Strength in N/mm ² W/P ratio: 0.18 | |
|-----------|---|-----|
| 7 Days | Approx. | 6.7 |
| 28 Days | Approx. | 8.1 |

Tensile Strength: Approx. 3.3 N/mm²@ 28 days, 30°C temp. W/P: 0.18.

Controlled Expansion: 1.94 % in the plastic state

Fresh wet density: at flowable consistency: Approx. 2.25

Compressive strength with addition of aggregates

| Days | Compressive strength (N/mm ²) W/P 0.18 % of aggregates (IS 516 - 1959) | | |
|------|--|-----|------|
| | 50% | 75% | 100% |
| 1 | 27 | 31 | 33 |
| 3 | 45 | 51 | 55 |
| 7 | 55 | 63 | 68 |
| 28 | 60 | 70 | 72 |

Water Powder Ratio:

Consistency W/P

Flow able 0.16 to 0.18

(Up to the flow able consistency and total bleed free mix but maximum.Up to 0.18)

Water required for 25 Kgs bag : 4.50 Lts @ W/P Ratio 0.18

Flow Characteristics: The flow is basically depends on the gap width and the head of the grout and governed by the gap width.

Yield: 13.0 Lts at flowable consistency for 25 Kgs of HDPE bags

Application Instructions:

Surface Preparation:

The substrate must sounds clean and free from contaminations, all loose particles must be removed. The steel and concrete surfaces must be etched mechanically to enhance the bonding properties

Mixing:

For best results a mechanically powered grout mixer should be used. When quantities up to 50kg are used, a heavy duty slow speed drill (400-500 rpm) fitted with a paddle is suitable. Larger quantities will require a heavy duty mixer. To enable the grouting operation to be carried out continuously, it is essential that sufficient mixing capacity and labour are available. The use of a grout

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holding tank with provision to gently agitate the grout may be required.

The water content should be accurately measured into the mixer. The total content of the MYK Grout M 50 bag should be slowly added and continuous mixing should take place for 5 minutes. This will ensure that the grout has a smooth even consistency & No lumps in the mix.

Application:

Pre soak the concrete surface with lots of clean water before the application is carried. All the surplus water is removed before the grouting application is carried out.

Placing:

At 30°C the grout within 15 minutes of mixing to gain the full benefits of the expansion process. Continuous grout flow is essential for large applications. Sufficient grout must be prepared before starting. The time taken to pour a batch must be regulated to the time to prepare the next one.

Working Time:

Following mixing the material should be placed within 15 minutes at 23°C (depending upon the temperature and other conditions).

Storage & Shelf Life:

Store under covered, in unopened condition, clear of the ground in cool dry condition, protected from frost and excessive draught. When stored in the above conditions to be used within 6 months from the date of manufacture.

Curing:

The entire exposed surface must be adequately cured with clean water.

Shuttering:

The form work should be constructed to be leak proof. This can be achieved by using suitable material or by using foam rubber strip or mastic sealant beneath the constructed form work and between joints

Working Conditions:

Do not place the grout when the ambient temperature is 5

deg Celsius. Use hot water to gain the strength when the temperature is low and cold water when the temperature is high

Supply: 25 Kgs HDPE bags

Quality Policy:

The information given in the data sheet is based on the years of experience, and found correct to the best of our knowledge. However the success of the product & its application is dependent on many external factors. We are fully assured of our products quality at the time of despatch. As we are constantly endeavoring to enhance the qualities of our products which may reflect changes in the data sheets. Hence in the event of any doubt on critical parameters it is advisable to consult our technical department

Technical Support:

Technical information regarding Schomburg range of products can be obtained from the technical cell of MYK Schomburg

Note:

Information in this technical data sheet is to the best of our knowledge true and accurate. However, such conditions under which our products may be used are beyond our control, recommendations

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