# Grouts & Anchors

# **ArmGrout NS 50**

(Formerly known as MYK GROUT M50)
Free flow Non-shrink expansive grout



#### TECHNICAL DATA SHEET

# **Product Description**

ArmGrout NS 50 is free flow, Non-Shrink, high strength expansive grout for thickness of 100mm. It can with stands static load and dynamic load. It is based on portland cement, graded aggregates and additives. The special additives used impart controlled expansion in the plastic state. The low W/C ratio ensures high Early and Final Compressive Strength. The flow characteristic of the grout fills the voids between the base plate and the concrete foundations completely and permanently. It effectively transfers all operational loads to the foundation.

#### Uses

- Used for precision grouting
- Grouting of base plates of turbines, generators, compressors, boiler feed pumps
- Anchoring for a wide range of fixings, Masts, anchor bolts and fence posts.
- Bore packing

# **Features and Benefits**

- Develops very high early and final strengths
- Non-shrink material
- Pre packed, 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.

# **Application Methodology**

### **Step No 1: Surface Preparation:**

The substrate to be grouted must be sound, 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.

#### Step No 2: Product 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 water content should be accurately measured and taken into clean mixing vessel or the mixer. The total content of the ArmGrout NS 50 bag should be slowly added and continue mixing for 3 to 5 minutes. This will ensure a smooth even consistency with no lumps in the grout mix.

#### Water Powder Ratio:

Consistency	W/P
Flowable	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 depends on the gap width and the head of the grout and governed by the gap width.

Ver/6/Oct 2021 1 of 3

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

#### Placing:

To gain the full benefit of the expansion process, the grout shall be placed within 15 Minutes @30 degree after mixing for large applications ensure continuous grout flow. 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:**

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

**Yield**: 13.0 Lts at flow able consistency for 25 Kgs of HDPE bag.



#### **Technical Data**

# Compressive strength:

Age Days	Compressive Strength: (BS 1881-part 116 : 1983)
Flowable W/P 0.18	
1 Day	>15N/mm²
3 Days	>30N/mm²
7 Days	>40N/mm²
28 Days	>50N/mm²

Note: Cubes used 70.6mm\*70.6mm\*70.6mm, tested at 30°C.

# Flexural Strength at 30°C: BS 4551/1998

Age/ Days	Flow able Strength in N/mm2 WP ratio : 0.18
7 days	6
28 days	8



Ver/6/Oct 2021 2 of 3

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### **Packaging**

25 Kgs HDPE bags

# Storage and 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 with 6 months from the date of manufacture.

# **Health & Safety**

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

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

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

# **Product Categories Available**



# **Legal Note**

The information, and, in particular, the recommendations relating to the application and end-use of MYK Arment products, are given in good faith based on MYK Arment current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with MYK Arment's recommendations. In practice, the difference in materials, substrates and actual site conditions are such that no warranty in respect of merchant ability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application & purpose. MYK Arment reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request.

Ver/6/Oct 2021 3 of 3