



# **ROKSO GROUT NSC**

## **PRODUCT CODE : 733**

### **HIGH STRENGTH, NON-SHRINK, FREE FLOWING, EXPANSIVE GROUT.**

#### **SPECIFICATION TYPE**

ASTM C 827-78, ASTM C 387-77A, CRD-C-81-74, BS 5383 PART 2 1980 E CRD-C-621-1983, ASTM C 878.

#### **USES**

A free flowing non-shrink rheo-plastic grout with a wide range of applications. Primary use is for high strength grouting where complete filling of voids is needed with a material which will continue to fill at the time of hardening; for grouting and fixing of heavy machinery, bearing plates, anchor bolts, dowel bars, crane rails, etc.

#### **DESCRIPTION**

A specially prepared, ready to use grey powder which requires addition of water only, on site, to provide a free flowing non-shrink rheoplastic grout.

#### **COMPOSITION**

**ROKSO GROUT NSC** is a blend of selected Portland cements, specially graded silica sands and fillers, expansion control additives and fluidities and is designed to produce a grout with predictable performance, free from segregation and bleeding.

#### **ADVANTAGES**

1. High Early & Ultimate Strength: Reaches strength as specified in CRD-C 621-83 for 7 days in 24 hours and 28 days in 72 hours. Ultimate strength in excess of 600 kg/cm.
2. Non-Shrink: Eliminates shrinkage commonly encountered in both plastic and hardened phases.
3. Predictable Performance: All solid ingredients are precision mixed in the factory facilitating controlled quality on-site.
4. Impermeable: Dense grout, resistant to oil and water penetration.
5. Non-Ferrous: Contains no ferrous metal and therefore will not corrode the anchor bolts & base plates.
6. Chloride free: Predictable high early and ultimate strength without use of chlorides.
7. Pumpable: Easily pumped; due to its microcellular material structure, it does not put excessive wear on pump equipment.
8. **ROKSO GROUT NSC** is free from Sulphates, Phosphates and Nitrates.

#### **ACTION**

**ROKSO GROUT NSC** begins to act as soon as water has been added to the mix effecting the controlled expansion characteristics. This reaction continues until firm contact is made with the confining surfaces or until the material sets. The controlled expansion of **ROKSO GROUT NSC** will offset shrinkage due to settlement, hydration and evaporation.

#### **DIRECTION FOR USE**

Mixing: Damp down the inside of the grout mixer with water prior to mixing the initial batch of **ROKSO GROUT NSC**. Ensure the mixer is damp but free of stagnant water. Add the premeasured quantity of necessary water. Slowly add the **ROKSO GROUT NSC** powder continuously. Mix for atleast 5 mts. until a smooth, uniform, homogenous mix is achieved.

**PREPARATION:** It is imperative that the foundation surface is free of oil, dust, dirt, paint, curing compound, etc. Soak area to be grouted with water prior to grouting to minimise localised absorption of water and assist in the free flow of the grouts. Surfaces should be damp but free of stagnant water.

Particular care should be taken for bolt-holes to ensure these are water-free. Use oil free compressed air to blow out bolt holes etc. as necessary. Ensure base plates, bolts etc., are clean and free of oil, grease and paint, etc. Set and align equipment-if shims are to be removed after the grout has set, then lightly grease them to facilitate easy removal.

**Placing :** Length of chains or metal strapping laid in the formwork prior to placing may be necessary to assist grout flow over large areas and assist in compading and eliminating air pockets. If chains are to be used, move them in short, quick strokes and remove it before initial set occurs. Pour the grout continuously and maintain a constant hydrostatic head (preferably atleast 15cms.) On the same side where the grout has been poured, allow 15cm clearance between the side of the form and the base plate of the machine. On the opposite side allow atleast 5-10 cm for the head of grout and 5cm clearance between the formwork and base plate.

**Curing:** After initial hardening of the grout, cure all exposed areas in accordance with normal practice either conventionally by utilising water, wet hessian or by the use of a suitable curing membrane from the **ROKSO CUREON** range.

#### **PROPERTIES**

Water Addition	:	Flowable consistency water\grout ratio 0.17 to 0.18. Plastic consistency water\grout ratio: 0.16 to 0.17
Density	:	Flowable : 2170kg/m Plastic: 2250kg/m
Free Expansion	:	2 to 4% in the plastic state.
Water Absorption	:	Less than 2%
Restrained Expansion	:	Greater than zero, but not more than 0.4%
Mechanical	:	
Special Attributes	:	<b>ROKSO GROUT NSC</b> is a high strength precision grouting material.

The **ROKSO GROUT NSC** mix possess the following properties.

- Reduced coefficient of creep.
- Increased strength when fully restrained.
- Increased bond strength.
- Superior workability.
- High compressive, tensile and flexural strength.

Relationship between compressive strength and time of plastic and flowable consistencies of **ROKSO GROUT NSC** according to BS 1881 at 20 degree C in restrained condition.

**Notes:** To simulate on-site conditions, it is necessary to conduct compressive strength trails under restraint.

#### **YIELD ECONOMY**

Approximately 28 liters per 50 kg sack (0.028 Cu. Mt. per sack)

**ROKSO GROUT NSC** is economical when compared with other grouts because of its higher yield. In less demanding situation further cost reduction is possible by mixing clean and sound 10 mm and down aggregates with **ROKSO GROUT NSC** in the proportion of 1:1 by volume with reduced flow.

#### **STORAGE**

Being cement based **ROKSO GROUT NSC** should be stored in the same manner as cement in cool and dry conditions. Storage life is approximately 12 months.

#### **PACKING**

**ROKSO GROUT NSC** is available in 25 to 50 kg multi-ply sacks.

**Manufactured in INDIA by**  
**ROKSO INDIA PRIVATE LIMITED**

**AN ISO 9001 : 2008 CERTIFIED COMPANY**

**ADMN.OFFICE: 605,SAI JANAK CLASSIC,ABOVE MURLIDHAR SWEETS, NEAR FLYOVER BRIDGE, DEVIDAS LANE, BORIVALI (W) MUMBAI-92**  
**REGD OFFICE : 202,MADHUVAN,SHRI KRISHNA COMPLEX,NR.SHRIRAM NAGAR,VIVA COLLEGE RD,VIRAR(WEST) DI :PALGHAR -401303 MS**  
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