Nordbak®

Technical Data Sheet
June 2024

NORDBAK FAST SET GROUT

Part Number: 9505-9970 (10KG)

Description:

NORDBAK® Fast Set Grout is perfect for grouting new machinery or replacing deteriorated grout, it offers self-leveling capabilities due to its low viscosity. It surpasses concrete in strength, resisting moisture and chemicals while ensuring zero shrinkage and superior adhesion compared to standard grouts.

Features:

NORDBAK® Fast Set Grout stands out as an innovative 100% solids epoxy grouting system, significantly reducing maintenance costs. Its rapid mixing process and simple application, requiring only two individuals without the need for mixers, wheelbarrows, or specialized equipment, streamline installation.

Intended Use:

The reliability of **NORDBAK® Fast Set Grout** is well-established, having demonstrated its effectiveness in numerous installations of Nordberg crushers, grinding mills, mine hoists, diesel engines, hydraulic presses, and various other specialized machinery operating under severe conditions.

Limitation:

Please note that the customer is responsible for selecting the appropriate product, and Nordbak accepts no responsibility in this regard.

Product Performance:

NORDBAK® Fast Set Grout: Ideal for new machinery or grout repairs. Self-leveling, stronger than concrete, and resistant to moisture and chemicals.

Advantages:

NORDBAK® Fast Set Grout offers advantages such as easy mixing and application, rapid setting, high strength, and minimal cleanup requirements.

Technical Data:

Impact (Modified Colorado School of Mines 52 impact test)	
Compressive Strength (ASTM D 695-54)	114 MPa
Tensile Strength (ASTM D638-61T)	28 MPa
Gel Time (Modified SPI-ERF 13-17)	25 min. at 21°C
Heat Distortion (ASTM D 648-56)	54°C
Pouring Viscosity (Brookfield Viscometer)	13 000 cps at 21°C
Curing Time (Full Cure)	12 Hours
Shear Strength (SPI-ERF 1569)	12 MPa
Modulus of Elasticity in Compression (ASTM D 695-54)	3,1 GPa
Coefficient of Thermal Expansion (ASTM D 696-44)	5 x 10 / °C
Thermal Conductivity (SPI-ERF 2269)	0,0015 calories/cm²/°C/Second/cm
Relative Density of cured material (SPI- ERF 369)	1,7
Shelf-life	12 months
Application	• Grouting new machinery

	• Crushers • Grinding mills • Mine hoists • Diesel engines • Hydraulic presses
Product Features	• Self-leveling • Strength • Chemicals and moisture resistance

Preparing Foundation:

- The area to be grouted must be cleaned of all loose materials. Remove all rust, grease and oil from sole plates, rails, machinery bases, etc.
- New foundation surfaces should be scarified to provide good bonding.
- All forms and other areas where grout should not adhere must be coated with oil, wax or grease.
- Simply mix **NORDBAK® FastSet Grout** resin and hardener in the container provided and pour in place. Revert to **container label for specific instructions.**
- Ambient temperatures will affect the working life and curing time of **NORDBAK® FastSet Grout.** At lower temperatures it will have a considerably longer working life than at high temperatures. In a 12mm layer at 21°C grout will set up in 20 to 25 minutes and be ready for use in 12 hours.

Application and Technical Assistance:

The skilled resin specialists who staff our modern testing laboratory can help solve any problems you have concerning resin systems. Let us know how we can help.

NORDBAK® Fast Set Grout is ideal for applications where only 6mm to 25mm of material are required. New foundations should be designed with as shallow a grout area as possible. This will cut material costs and installation time. Fast Set Grout fills the smallest openings without leaving voids and has high compressive strength (114 MPa) and resiliency for application under heavy machinery. Less than 12 hours curing time is required before the Grout is ready for use.

After the shim pads were level and **NORDBAK® Fast Set Grout** had set, a standard grout was poured under the sole plates as a filler.

Fast set grout will not freeze even at -15°c.

Do not mix resin and hardener until ready to commence.

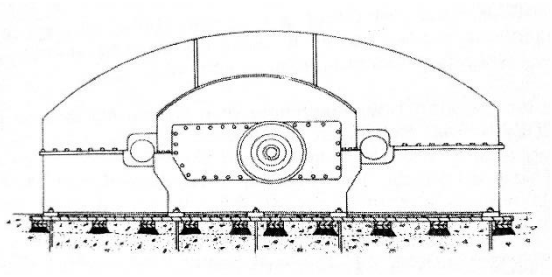
Experience-backed reasons to choose Nordbak Fast Set Grout:

NORDBAK® Fast Set Grout was poured under 25mm x 355mm x 380mm shim pads which support sole plates for a 38t speed reducer used with a 3,35m x 9,6m grinding mill at a major cement producing plant.

Normally, each of the pads is set in a standard grout mixture. But because of the low ambient temperature in mid-winter (-15°C) the grout would freeze before setting. This destroyed the strength of the grout and accuracy of the set up.

Accurate placement of these sole plates is essential. Tolerance of setting is 0,08mm/m and the plates must be level to within 0,05mm of each other.

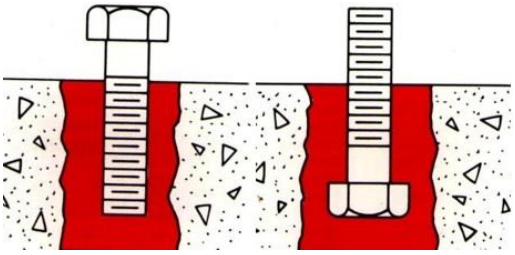
Fast Set Grout was used to level the shim pads on the rough concrete. Setting up **NORDBAK® Fast Set Grout** was accomplished by preheating the shim pads with a torch to approximately 93°C. and laying them in a pool of Grout. Curing time was approximately 30 minutes. After two hours, bonded pads held fast despite pounding with a 5kg hammer.



Vibration Resistant… Binds Steel to Concrete:

NORDBAK® Fast Set Grout is ideal for binding metal anchor bolts to concrete foundations. It is vibration resistant and will not chip out or break loose under severe conditions as ordinary grouts often do.

- When permanent installations are required, a hole slightly larger than the bolt head should be drilled into the foundation. Fill the hole ½ full of **NORDBAK® Fast Set Grout**. Preheat the bolt to 66°C and place it in the hole. Then add more Grout if necessary. The bolt will be permanently set in one hour. Fast Set Grout provides 100% backing from the moment of hardening.



- For temporary installations, coat the bolt with oil or release agent, such as teflon or silicon to facilitate easy removal. Repeat the permanent grouting procedure, remembering to keep the bolt exposed.

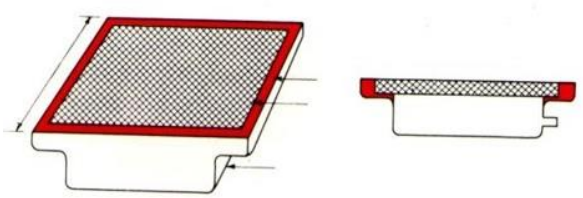
- Just mix and pour…costs are less because of the savings in time and labour. A Canadian refractory company used **NORDBAK® Fast Set Grout** to seal air pads to prevent the bypassing of air and loss of aeration. The air pads are porous blocks located inside feed silos. The pads aerate and assist in the blending and flowing of material used in the manufacture of refractory brick.

  The standard grouts, used before **NORDBAK® Fast Set Grout** was applied, these did not bind well to steel and broke away when the air pads were walked on by maintenance men during cleanup and inspection.

  NORDBAK® Fast Set Grout was used to grout a few air pads in one of the silos. It worked so well that shortly after the first test was made, all 320-air pads in the silo were grouted with **NORDBAK® Fast Set**

Grout. The results were excellent. Fast Set Grout adheres to the air pads and steel, it does not break up under mechanical punishment and seals the pads effectively.

NORDBAK® Fast Set Grout was safe and simple to prepare and fast and easy to apply.



The air pads are 300mm square and the grouted area between pads is approximately 300mm X 10mm X 25mm.

Product Appearance:

Components	Two Parts – Resin & Hardener
Appearance (Resin)	Grey
Appearance (Hardener)	Clear
Colour	Please note that there may be a slight potential variation in colour between batches.

Technical Tips:

Working time and cure time is dependent on temperature and mass:

- The higher the temperature, the faster the cure.
- The larger the mass of **NORDBAK® Fast Set Grout** the faster the cure.

To speed up the curing time at low temperatures:

- In cold weather, store kits in a warm area and warm the resin to at least 15°C before mixing.
- Pre-heat repair surface until warm to touch.

Protection:

- All work is to be done in a well-ventilated area.
- Ensure the use of adequate PPE to be worn upon mixing and application.
- Refer to Material Safety Data Sheet.

Storage:

Store **NORDBAK® Fast Set Grout** indoors on pallets at temperatures between 10°C and 35°C. Keep container tightly closed and away from acids and oxidizers. If product is removed from container do not return it to original container to avoid contamination

Disclaimer:

The information provided in this data sheet including the recommendations for use and application of this product are based on our knowledge and practical experience and laboratory tests of the product as at the date hereof. This data sheet shall be used as a guide to the user's application.

This product has been designed for specific applications based on normal working and

operating conditions, and although it may be used in different applications and working conditions such instances are beyond our control. Therefore Nordbak shall not be liable for the suitability/merchantability of our product in your application unless we have specifically advised so in writing. Accordingly, we advise that you conduct your own investigations to confirm the suitability of our product, as it ultimately remains the user's responsibility to protect property and persons against hazards emanating from the handling and use thereof. Accordingly, any civil liability as a result of damages, injury, or death, in respect of the information in this data sheet, or any other written or oral recommendation(s) regarding the suitability of this product, are hereby excluded. Furthermore Nordbak shall not be liable under any circumstances for any consequential or incidental damages of any kind, including but not limited to loss of profits.