



NS GROUT

NON-SHRINK, NON-STAINING, NON-METALLIC HIGH STRENGTH GROUT

EUCLID CHEMICAL

GROUTS

NS GROUT

Rev:01, 04/20

DESCRIPTION

NS GROUT is designed for critical use where high strength, non-staining characteristics and positive expansion are required, can be used for Static and Dynamic load. NS GROUT contains only natural aggregate and an expansive cementitious binder. It is extremely flowable. When cured, it appears similar to concrete in appearance.

PRIMARY APPLICATIONS

- Pumps and fans
- Compressors & motors
- Generators
- Machine bases of all type
- Anchor bolts
- Column baseplates

FEATURES/BENEFITS

- Non-staining natural aggregate for better appearance
- Excellent bearing/Static & Dynamic load
- Compatible for Galvanic Anodes(Fluids)
- Appearance of plain concrete
- Does not contain any added chloride ions outstanding strength

TECHNICAL INFORMATION

Material properties tested under laboratory conditions 27°C, 50% RH

PROPERTY	FLOWABLE CONSISTENCY	FLUID CONSISTENCY
Flow Rate (ASTM C939/CRD C621)	120% (Flow Table)	20 to 30 seconds (Flow Cone)
Compressive Strength (ASTM C109 Modified*) 70.6 mm cubes	1 day 25 MPa 3 days 35 MPa 7 days 45 MPa 28 days 65 MPa	1 day 26 MPa 3 days 50 MPa 7 days 60 MPa 28 days 70 MPa
Expansion (CRD C621)	3 days 0.02% 7 days 0.02% 14 days 0.03% 28 days 0.03%	3 days 0.01% 7 days 0.03% 14 days 0.05% 28 days 0.05%
Setting Time	Initial Set Final Set	3 to 4 hours 4 to 6 hours

*See ASTM C 1107 Section 11.5

PACKAGING/YIELD

NS GROUT is packaged in 25 kg bag . 25 kg yields 0.013 m³ of fluid grout when mixed with 4.5 L of water. NS Grout 25 kg with 12.5 kg of 10 mm aggregate will yield approximately 0.017 m³ of flowable consistency grout. Use pea gravel for deep fills over 100 mm only.

SHELF LIFE

6 months in original, unopened package

APPEARANCE

NS GROUT is a free flowing powder designed to be mixed with water. After mixing and placing, the color may initially appear much darker than the surrounding concrete. While this color will lighten up substantially as it cures and dries out, the grout may always appear somewhat darker than the surrounding concrete.

SPECIFICATIONS/COMPLIANCES

- Fully complies with CRD C 621, Corps of Engineers Specification for Non-Shrink Grout
- Fully complies with ASTM C 1107, Standard Specification for Packaged Dry, Hydraulic-Cement Grout
- Canadian MTQ

DIRECTIONS FOR USE

Note: The contractor and engineer are encouraged to consult and review the Euclid Chemical bulletin: "Cementitious Grout Application Guide". The document offers instructions detailing the general installation of Euclid Chemical manufactured cement-based grout products.

Important: If the contractor is not familiar with standard grout placement techniques, a pre-job meeting is suggested to review the project details unique to the particular job. Contact your local Euclid Chemical representative for additional information.

MIXING CONSISENCY	ESTIMATED WATER CONTENT
Fluid	4.5 L/25 kg
Flowable	4.0 L/25 kg
Plastic	3.6 L/25 kg

*Do not add water in an amount that will cause bleeding or segregation. More or less water may be required to achieve a 25second flow or the desired placing consistency, depending on temperature and other variables. Do not add sand or cement to the grout since this action will change its precision grouting characteristics.

Where NS GROUT will be placed at a **thickness over** 100 mm, up to 12.5 kg of Aggregate must be added to each bag of grout. Note that the water demand to achieve a certain flow level of the grout will change. Once the correct amount of water has been added to a clean mixing pail, mix the grout with a high speed drill and mixing paddle for 3 minutes. Quickly transport the grout to the placement area.

Placing: NS GROUT sets more rapidly than plain mortars; therefore, place quickly and continuously. If placing this product in hot weather, the use of cold water will increase the working time, curing should be done immediately after final setting time. Base plate grouting 50 mm minimum shoulder required.

Curing and Sealing: Proper curing procedures are important to ensure the durability and quality of the grout. Wet cure the grout until the forms are stripped. Cure the grout with a high solids curing compound, such as SUPER REZ-SEAL or SUPER AQUA-CURE VOX.

CLEAN-UP

Clean tools and equipment with water before the material hardens.

PRECAUTIONS/LIMITATIONS

- Do not add sufficient water to promote bleeding of the grout.
- Do not use this product at a flow cone rate of less than 20 seconds if checking flow rates on the job site (see CRD C-611 or ASTM C939 for flow cone method).
- Do not add any admixture or fluidifiers.
- Proper curing is required.
- Do not use material at temperatures that may cause premature freezing.
- Rate of strength gain is significantly affected at temperature extremes.
- Do not mix partial material.
- Do not allow grout to freeze until 27.6 MPa is attained.
- Employ cold or hot weather grouting practices per ACI guidelines as the temperature dictates.
- Store materials in a dry place.
- For dry pack applications, mechanically mix NS GROUT at a minimum water content of (2.10 L/25 kg)
- Add pea gravel when placing at a thickness greater than 100 mm.
- In all cases, refer the Safety Data Sheet before use.