



BORE-GROUT™

Pumpable Bentonite Grout

Description

BORE-GROUT™ Pumpable Bentonite Grout is a pumpable material designed for use in grouting a wide array of horizontal and vertical applications, including borehole abandonment, development of annular seals in wells, horizontally installed product lines and/or horizontal ground source heat loops. BORE-GROUT Pumpable Bentonite Grout is designed to be mixed and pumped with standard equipment.

Applications/ Functions

The use of BORE-GROUT Pumpable Bentonite Grout promotes the following:

- Low permeability grout for sealing vertical and horizontal bores
- Compatible with MAX-YIELD™ TCM Thermally Conductive Media or silica sand for horizontal heat loop installation

Advantages

- Versatile product that produces a uniform grout for smooth pumping
- Creates a low permeability seal
- Develops a permanent, flexible seal to prevent commingling between aquifers
- No heat of hydration
- No Portland or aluminum cement added
- No gypsum added
- NSF/ANSI/CAN Standard 60 Certified

Typical Properties

- Appearance: Beige to tan powder
 - Specific gravity: 2.6
 - Typical Permeability*: 3.0×10^{-8} cm/sec
- *Test data can be provided upon request.

Recommended Treatment

- Pre-treat mixing water with Soda Ash (sodium carbonate) to reduce total hardness to less than 100 mg/l and raise pH to 8.5-9.5.
- Using rig mixing equipment, blend one 50-lb (23 kg) bag of BORE-GROUT Pumpable Bentonite Grout into specified water content to achieve desired grout properties. Rate of addition should be about 20 seconds per 50-lb (23 kg) bag. Mix adequately, typically 30 seconds, depending on the mixer.
- Water concentrations may be altered based on specific conditions.
- Please refer to the treatment tables below for typical grout properties.

Water (US gal)	Slurry Volume Yield (US gal)	Slurry Density (lb/gal)	Total Solids (% by weight)
15	17.3	10.1	28.6%
20	22.3	9.7	23.1%
24	26.3	9.5	20.0%

NOTE: Bentonite grouts may not be appropriate in artesian conditions or where formation water chemistries exhibit total hardness of 500 parts per million or greater and/or the chloride content is 1500 parts per million or greater. If questions regarding subsurface environments arise, it is always best to consult your local Baroid IDP Representative to determine if the Baroid product of choice is appropriate for the given conditions.

NOTE: For use as a horizontal ground source heat loop grout, please contact your local Baroid IDP Representative for recommended concentrations of MAX-YIELD TCM Thermally Conductive Media or silica sand to achieve desired thermal conductivity values (k Value - BTU/hr-ft.²F).

Packaging

BORE-GROUT Pumpable Bentonite Grout is packaged in 50-lb (23 kg) multiwall paper bags, containing 0.7 ft³ (0.02 m³). 3000-lb supersacks are available by special order.

Availability

BORE-GROUT Pumpable Bentonite Grout can be purchased through any Baroid Industrial Drilling Products Retailer. To locate the Baroid IDP retailer nearest you contact the Customer Service Department in Houston or your area IDP Sales Representative.

Baroid Industrial Drilling Products Product Service Line, Halliburton

3000 N. Sam Houston Pkwy E.
Houston, TX 77032

Customer Service (800) 735-6075 Toll Free (281) 871-4612
Technical Service (877) 379-7412 Toll Free (281) 871-4613