



# BAROID AQUAGUARD®

One-Sack Borehole Grouting Material

**Description** AQUAGUARD® is a single-sack grout containing granular Wyoming sodium bentonite blended with inorganic additives. The grout is designed for sealing the annular space around monitor or water well casing.

## Applications/ Functions

*The use of AQUAGUARD grouting material assists or promotes the following:*

- Grout plastic and steel casings in monitor or water wells
- Seal downhole instruments in test and observation holes
- Seal cathodic protection installations

**AQUAGUARD grouting material is not recommended for use as a cement additive.**

## Advantages

- Does not contain any polymers
- Easy, one-sack, dust-free mixing
- Develops a 30% solids slurry weighing 10.1 lb/gal (1.21 g/cm<sup>3</sup>) with a hydrostatic gradient of 0.525 psi/ft (11.88 kPa/meter)
- Low-permeability, flexible seal helps prevent commingling of aquifers and entry of surface contaminants
- No heat of hydration, no damage to plastic casing due to temperature elevations
- NSF/ANSI Standard 60 certified

## Typical Properties

• Appearance	Tan to gray granules
• Specific gravity	2.5
• Slurry pH (8%)	8.0
• Electrical Resistivity, ohms-meter	0.5
• Yield Volume gal/sack (liters/sack)	16.3 (61.7)
• Permeability (30% solids grout)	3.0 x 10 <sup>-8</sup> cm/sec (in fresh water)

## Recommended Treatment

Do not over mix and do not use a centrifugal pump

1. Add one 50-lb (22.7 kg) sack of AQUAGUARD grouting material into 14 gallons (53 liters) of circulating fresh water over a 20 to 30 second interval. The resulting slurry contains 30% active solids and has a slurry density of 10.1 lb/gal, or 1.21 g/cm<sup>3</sup>.
2. Immediately tremie the grout into place after addition of AQUAGUARD grouting material.  
*Note: The slurry should contain suspended, unyielded bentonite granules which are allowed to hydrate and swell in situ.*

**Additional Information**

- The grouting material and method selected will depend upon the specific subsurface environment including all prevailing geological and hydrological factors and any existing regulatory requirements. The grouting process may not be complete until the grout is static at the desired level.
- The use of bentonite may not be appropriate in environments where the formation water chemistry has a total hardness of 500 parts per million or greater and/or a chloride content of 1500 parts per million or greater.
- If questions arise regarding subsurface environments 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.

**Packaging**

AQUAGUARD® is packaged in 50-lb (22.7 kg) multiwall paper bags containing 0.7 ft<sup>3</sup> (0.02 m<sup>3</sup>).

**Availability**

AQUAGUARD 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

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