



# BENSEAL®

## Sealing and Plugging Agent

**Description** BENSEAL is a granular (8-mesh), natural Wyoming sodium bentonite for use in sealing and grouting well casings and earthen structures. BENSEAL is not recommended for use as a drilling mud.

- Applications/Functions**
- Seal or grout plastic or steel casings in monitor and water well construction
  - Seal or plug any earthen borehole
  - Seal leaking ponds, ditches and dams
  - Soil stabilization
  - Prepare BENSEAL/EZ-MUD® and AQUA-GROUT™/BENSEAL grouting systems
  - Prepare a dry grout of BENSEAL and sand, one-to-one ratio by volume, admixture

- Advantages**
- High swelling capacity to create a tight seal
  - Granular, dust free, single-sack product
  - No heat of hydration
  - Prevents commingling of aquifers and contamination from surface
  - Forms a flexible seal to protect casing from corrosive contaminants
  - Allows for hole re-entry
  - ANSI/NSF Standard 60 certified

**Typical Properties**

• Appearance	Bluish to gray granules
• Dry screen analysis	85% of 8 mesh
• Bulk density, lb/ft <sup>3</sup>	73.4 (as packaged)
• Moisture, %	8 to 10
• Specific gravity	2.6
• Permeability	less than $1 \times 10^{-8}$ cm/sec (in fresh water)

- Recommended Treatment**
- As a casing drill and drive operation:**
1. Dig a cone-shaped depression around casing. Depression should be 6 - 8 inches (152-203 mm) larger than the outside diameter of the casing and 2 - 3 feet (60-75 cm) deep.
  2. Keep cone-shaped depression filled with dry BENSEAL while driving the casing.

**Recommended  
Treatment  
(continued)**

**Note:**

When drilling and driving a 4" (102mm) pipe, expect to use 2.5 pounds of BENSEAL per foot of hole or 3.7 kilograms of BENSEAL per meter of hole.

***BENSEAL/sand grout:***

1. Combine BENSEAL and sand at a ratio of one-to-one by volume. Mix well.
2. This mixture can be poured from the top into holes not over 100 feet (30.5 meters) deep, and through 50 feet (15.3 meters) or less of standing water in the hole.

BENSEAL/sand is often used to set shallow casing, heat pumps, etc.

**Note:**

Sand particle size should be approximately equal to BENSEAL.

***Sealing earthen structures:***

1. Work BENSEAL into the top six inches (152 mm) of soil and compact it, completely covering the area that will be under water.

Normal treatment is between 3 to 5 pounds per square foot (14.5–24.5 kg/m<sup>2</sup>), depending on the type of soil. If the leaking area can be identified and isolated, an attempt can be made to broadcast BENSEAL uniformly into the water over the area in question.

***Lost returns (moderate):***

1. Begin with the pit full of mud.
2. Raise the pump suction off bottom and place a shovel next to it and slightly under suction.
3. Pour dry BENSEAL slowly into the space between shovel and suction.
4. Pump it down the hole.

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**Packaging**

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

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**Availability**

BENSEAL can be purchased through any Baroid Industrial Drilling Products Distributor. To locate the Baroid IDP distributor nearest you contact the Customer Service Department in Houston or your area IDP Sales Representative.

**Baroid Industrial Drilling Products,**

**Distributed By: Global Drilling Suppliers, Inc.**

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