# BAROID® GRANULAR BENTONITÉ

30 Mesh Sealing and Plugging Material

#### Description

BAROID® GRANULAR is a specially processed, 30-mesh sodium bentonite for use in sealing and grouting boreholes and earthen structures.

# **Applications/Functions**

- Helps seal leaking ponds and earthen structures
- Mix with native soils to prepare a clay liner or cell for sewage lagoons, under storage tanks and landfills
- Plug abandoned holes
- Mix with native soils for use as backfill
- Mix with water for slurry trenching

# **Advantages**

- Effective in sealing and plugging
- Simple to apply
- Cost effective
- · Flexible seal providing low permeability
- Prevent entry of pollutants from the surface

# **Typical Properties**

| • | Moisture                                      | 7.7     |
|---|---|---------|
| • | Free swell (ml)                               | 29      |
| • | pH - 6% suspension                            | 9       |
| • | Specific gravity                              | 2.5     |
| • | Bulk density (lb/ft <sup>3</sup> ), compacted | 83      |
| • | Liquid limit number                           | 450-600 |

| Dry Sieve Analysis | Granular 30 Mesh |
|--------------------|------------------|
| % + 16             | 0.00             |
| % + 20             | 0.02             |
| % + 30             | 0.85             |
| % + 40             | 16.19            |
| % + 65             | 47.36            |
| % + 100            | 15.75            |
| % + 200            | 13.60            |
| % - 200            | 3.20             |





# Typical Properties (continued)

| Wet Sieve Analysis | Granular 30 Mesh |
|--------------------|------------------|
| % + 200            | 2.9              |
| % + 325            | 4.5              |

| X-Ray Analysis        |  |
|-----------------------|--|
| 85% Montmorillonite   |  |
| 5% Quartz             |  |
| 5% Feldspars          |  |
| 2% Cristobalite       |  |
| 2% Illite             |  |
| 1% Calcium and Gypsum |  |

# Recommended Treatment

# Sealing ponds or earthen structures

Depending on the native soil, disc in or mix 3 to 5 pounds of BAROID® GRANULAR sealing material per square foot (15-25 kg/m²). Do not neglect the edges of the dam or the sides/walls of the pond. Disc or mix uniformly the required amount of BAROID GRANULAR sealing material so that a 6" (152 mm) blanket of soil and BAROID GRANULAR sealing material is formed. This sealing blanket should then be compacted in place and as a further protection to the sealing blanket 2-4 inches (50-100 mm) of local soil or sand should cover the sealing blanket and be compacted.

If there is water in the pond and the leaking area can be identified and isolated, cover the leaking area from the surface with 4 to 6 pounds of BAROID GRANULAR sealing material per square foot (19-30 kg/m<sup>2</sup>) of surface area.

**Note**: Bentonite is more effective as a sealing agent when confined. Therefore, every effort should be made to cover the BAROID GRANULAR sealing material after it is broadcast with a 2-3 inch (51-76 mm) layer of sand. This will reduce the potential for dispersion into the water and un-yielded bentonite particles interfering with the gill action of fish.

#### To suspend cuttings while cable tool drilling

Place BAROID GRANULAR sealing material in plastic bags. With the tools out of the hole, drop enough bags to get 6 to 10 pounds (2.7-4.5 kg) of BAROID GRANULAR sealing material to the bottom of hole. If hole is dry, add water. While drilling ahead, the churning action of the tools will form a thick slurry that will support the cutting off bottom and make it easier for the bailer to remove them.



**Packaging** BAROID® GRANULAR sealing material is packaged in 50-lb (22.7 kg)

multiwall paper bags.

Availability BAROID GRANULAR sealing material 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