BARACARB®-DF sized-ground marble is South America sourced and is an acid soluble engineered sized product that can be used as a bridging agent for fluid loss applications, increasing fluid density for drill-in applications, or as part of a borehole strengthening treatment in conjunction with the WellSET® service. BARACARB-DF ground marble is available in five particle size ranges: 5, 25, 50, 150 and 600. The numbers reflect the nominal median particle size (d50) of the product. The ground marble has a specific gravity of 2.7 and resists size reduction through attrition while drilling, compared to ground limestone.

### Applications / Functions
- BARACARB-DF 5, 25, 50, 150, and 600 bridging agents can be used to:
  - Increase the density of water-based and oil-based drilling fluids
  - Bridge for fluid loss control
- BARACARB-DF bridging agent can be used for:
  - Lost circulation problems
  - Squeeze mixes

### Advantages
- Fully soluble in 15% HCL solution (1 gal of HCL dissolves 1.84 lb of BARACARB-DF bridging agent)
- Helps provide effective formation bridging

### Typical Properties
- Appearance: White powder or granules
- Specific gravity: 2.7

### Recommended Treatment
Use the following formulas to determine the appropriate concentrations to be added.

1. As a weighting agent, add BARACARB®-DF 5, 25, 50, 150 or 600 bridging agents as needed to increase fluid density up to 14 lb/gal (1.68 gm/cm).
   - For 1 bbl starting volume:
     \[ X = 945 \left( \frac{W_f - W_i}{22.5 - W_f} \right) \]
   - For 1 bbl final volume:
     \[ X = 945 \left( \frac{W_f - W_i}{22.5 - W_i} \right) \]
   Where:
   - \( X \) = BARACARB-DF sized-calcium carbonate bridging agent required, lb/bbl
   - \( W_f \) = Final desired mud weight, lb/gal
   - \( W_i \) = Initial mud weight, lb/gal

2. As a bridging agent, add 5-10 lb/bbl (14.3-28.5 kg/m³) of the appropriate grade(s) of BARACARB-DF bridging agent.

Note: The added BARACARB-DF bridging agent should have an average particle size at least one third the formation pore diameter to maximize bridging effectiveness.

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BARACARB-DF 5, 25, 50, 150, and 600 bridging agents are packaged in 55.1-lb (25-kg) sacks.