

**Description** BARA-KADE® ES 200 is an engineered Wyoming sodium bentonite modified with polymers for sealing and containment in harsh environments. It has been proven as an effective sealing material, especially in brackish waters containing hydrocarbons and low pH contaminants.

- Applications/Functions**
- Wastewater contaminants.
  - Hydrocarbon tank from brim containment.
  - Industrial waste pond impoundment liners.

- Advantages**
- High absorbing capacity.
  - Ability to create a seal in contaminated waters.
  - Exhibits low permeability.

Properties	Typical	Specification
• Moisture, percent	• 9.0-11.0	• 12 Max
• PWA, %wt @ 20°C/18/hr	• 1100-1450	•
• Swell Index (ml/2gr)	• 40-60	•
• Bulk Density (lbs/ft <sup>3</sup> compacted)	• 68-73	•

**Performance Specifications**

Test Permeant	Duration of Test (days)	Permeability
Tap Water	300	1 x 10 <sup>-9</sup>
Synthetic Brine <sup>(1)</sup>	300	1 x 10 <sup>-7</sup>
1.5% Calcium Solution <sup>(2)</sup>	180	1 x 10 <sup>-8</sup>

<sup>(1)</sup>Synthetic brine is an aqueous solution containing the following dissolved solids: 1.2% calcium, 0.1% magnesium, 0.2% potassium, 0.6% sodium, <0.1% chlorides, 0.11% sulfate. pH=5.5, density=8.7 lbs/gallon.

<sup>(2)</sup>An aqueous solution containing 1.87% calcium carbonate, 0.96% calcium phosphate, 0.52% oxide.

**Availability** BARA-KADE® ES 200 can be purchased through any Bentonite Performance Minerals LLC assigned Reseller. To locate the BPM Reseller nearest you, contact the Customer Service Department in Houston or your area BPM Regional Sales Manager.

**Bentonite Performance Minerals LLC**  
**A Halliburton Company**  
 3000 N. Sam Houston Pkwy E.  
 Houston, TX 77032  
[www.bentonite.com](http://www.bentonite.com)

**Customer Service** (281) 871-7900      **Fax** (281) 871-7940