



TECHNICAL INFORMATION

BIG HORN® 12

Description: **BIG HORN® 12** is a specially sized pure sodium bentonite for use in binding, sealing, absorbing and general applications.

| | | |
|---------------------------------|-------------------------------------------------------|--------------------------------|
| Typical Characteristics: | Bulk Density (lbs/ft³): | 63 ± 3 |
| | Cation Exchange Capacity (CEC meq(100gm): | 70 – 90 |
| | Color: | Light Grey to Tan |
| | Free Swell (cc/2gm): | 20 ± 4 |
| | Moisture Content (%): | 6 - 10 |
| | pH: | 9.1 ± 0.4 |
| | Resistivity (ohm-meters): | 2.40 |
| | Specific Gravity: | 2.55 ± 0.1 |
| | Thermal Conductivity (Btu/hr-ft-°F): | Dry – 0.20 Saturated – 0.50 |
| | Wet Screen Analysis (% Residue on #200 Sieve): | 3.0 ± 0.5 |

Typical Sieve Analysis:

| Sieve Size | % Retained |
|------------|------------|
| #8 | 0.6 |
| #20 | 34.78 |
| #100 | 49.64 |
| #200 | 9.66 |
| Pan | 5.32 |

| Typical Chemical Analysis: | % |
|--------------------------------|-------|
| SiO ₂ | 60.34 |
| Al ₂ O ₃ | 19.28 |
| Fe ₂ O ₃ | 3.48 |
| Na ₂ O | 2.34 |
| TiO ₂ | .22 |
| CaO | .38 |
| MgO | 1.67 |
| K ₂ O | .10 |
| H ₂ O | 7.75 |
| Other | .07 |
| L.O.I. | 4.37 |

| E.P.A Toxicity Analysis: | E.P.A Standard (ppm) | Typical Analysis (ppm) |
|--------------------------|----------------------|------------------------|
| Arsenic | 5.0 | <0.1 |
| Barium | 100.0 | 0.5 |
| Cadmium | 1.0 | <0.05 |
| Chromium | 5.0 | <0.1 |
| Lead | 5.0 | <0.1 |
| Mercury | 0.2 | <0.02 |
| Selenium | 1.0 | <0.05 |
| Silver | 5.0 | <0.1 |

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