

**General Purpose
Calcium Bentonite**

Revised 05/25/06

Panther Creek[®] 200

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|--------------------------------|---|------------------|---------|--------------------------------|---------|--------------------------------|--------|-----|--------|-----|--------|-------------------|--------|------------------|--------|-----|--------|
| General Description | Panther Creek 200 is a consistent, high-quality calcium bentonite supplied as a 200 mesh powder. | | | | | | | | | | | | | | | | |
| Functional Use | A general purpose filler and binder for compressed and pelletized products. Used to increase green compression strength and impart flowability. | | | | | | | | | | | | | | | | |
| Purity | Hydrous aluminum silicate comprised principally of the clay mineral montmorillonite. Montmorillonite content 85% minimum. Contains minor amounts of feldspar, calcite, and quartz. | | | | | | | | | | | | | | | | |
| Moisture | Maximum 12% as shipped. | | | | | | | | | | | | | | | | |
| Dry Particle Size | Minimum 70% passing 200 mesh (74 micron). | | | | | | | | | | | | | | | | |
| pH | 6.0 to 10.0 @ 5% solids. | | | | | | | | | | | | | | | | |
| CEC | 97 – 109 meq / 100g. | | | | | | | | | | | | | | | | |
| Exchangeable Calcium | Minimum 50 meq / 100g. | | | | | | | | | | | | | | | | |
| Chemical Formula | Diocahedral smectite, an expanding layer silicate: $(\text{Na,Ca})_{0.33}(\text{Al}_{1.67}\text{Mg}_{0.33})\text{Si}_4\text{O}_{10}(\text{OH})_2 \cdot n\text{H}_2\text{O}$ | | | | | | | | | | | | | | | | |
| Elemental Composition | Typical analysis – moisture free. <table><tr><td>SiO₂</td><td>60.50 %</td></tr><tr><td>Al₂O₃</td><td>18.20 %</td></tr><tr><td>Fe₂O₃</td><td>5.25 %</td></tr><tr><td>MgO</td><td>3.26 %</td></tr><tr><td>CaO</td><td>3.14 %</td></tr><tr><td>Na₂O</td><td>0.20 %</td></tr><tr><td>K₂O</td><td>0.14 %</td></tr><tr><td>LOI</td><td>4.85 %</td></tr></table> | SiO ₂ | 60.50 % | Al ₂ O ₃ | 18.20 % | Fe ₂ O ₃ | 5.25 % | MgO | 3.26 % | CaO | 3.14 % | Na ₂ O | 0.20 % | K ₂ O | 0.14 % | LOI | 4.85 % |
| SiO ₂ | 60.50 % | | | | | | | | | | | | | | | | |
| Al ₂ O ₃ | 18.20 % | | | | | | | | | | | | | | | | |
| Fe ₂ O ₃ | 5.25 % | | | | | | | | | | | | | | | | |
| MgO | 3.26 % | | | | | | | | | | | | | | | | |
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| Na ₂ O | 0.20 % | | | | | | | | | | | | | | | | |
| K ₂ O | 0.14 % | | | | | | | | | | | | | | | | |
| LOI | 4.85 % | | | | | | | | | | | | | | | | |
| Packaging | Multi-wall paper bags 100-pound or 50-pound, or bulk. | | | | | | | | | | | | | | | | |

Disclaimer: The information and data contained herein are believed to be accurate and reliable. ACC makes no warranty of any kind and accepts no responsibility for the results obtained through application of this information