

Technical Data Sheet  
Powder Sodium Bentonite

Revised: 8/25/09

## VOLCLAY<sup>®</sup> POWDER

<b>General Description</b>	Volclay Powder is a naturally occurring sodium bentonite with an average particle size less than 200 mesh.																		
<b>Function</b>	Fine powder used as a binder for livestock and poultry feeds and as a digestive aid.																		
<b>Chemical Formula</b>	Diocahedral smectite, an expanding layer silicate: $(\text{Na,Ca})_{0.33}(\text{Al}_{1.67}\text{Mg}_{0.33})\text{Si}_4\text{O}_{10}(\text{OH})_2 \cdot n\text{H}_2\text{O}$																		
<b>Elemental Composition</b>	Typical analysis – moisture free. <table border="0" style="margin-left: 40px;"> <tr><td>SiO<sub>2</sub></td><td>63.02 %</td></tr> <tr><td>Al<sub>2</sub>O<sub>3</sub></td><td>21.08 %</td></tr> <tr><td>Fe<sub>2</sub>O<sub>3</sub></td><td>3.25 %</td></tr> <tr><td>FeO</td><td>0.35 %</td></tr> <tr><td>MgO</td><td>2.67 %</td></tr> <tr><td>Na<sub>2</sub>O</td><td>2.57 %</td></tr> <tr><td>CaO</td><td>0.65 %</td></tr> <tr><td>Trace</td><td>0.72 %</td></tr> <tr><td>LOI</td><td>5.64 %</td></tr> </table>	SiO <sub>2</sub>	63.02 %	Al <sub>2</sub> O <sub>3</sub>	21.08 %	Fe <sub>2</sub> O <sub>3</sub>	3.25 %	FeO	0.35 %	MgO	2.67 %	Na <sub>2</sub> O	2.57 %	CaO	0.65 %	Trace	0.72 %	LOI	5.64 %
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<b>Moisture</b>	Maximum 12% as shipped.																		
<b>Bulk Density</b>	52-57 lbs./cu.ft.																		
<b>Dry Particle Size</b>	Minimum 70% passing 200 mesh (75 μm).																		
<b>Base Exchange</b>	The typical base exchange ions, expressed in milliequivalents per 100 grams. <table border="0" style="margin-left: 40px;"> <tr><td>Sodium</td><td>60 - 65</td></tr> <tr><td>Calcium</td><td>10 - 30</td></tr> <tr><td>Magnesium</td><td>5 - 20</td></tr> <tr><td>Potassium</td><td>1 - 5</td></tr> </table>	Sodium	60 - 65	Calcium	10 - 30	Magnesium	5 - 20	Potassium	1 - 5										
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<b>pH</b>	8.0 - 10.5 @ 5% solids.																		
<b>Packaging</b>	50 pound multi-wall paper bags, 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