

Technical Data Sheet
Powder Sodium Bentonite

Revised: 8/25/09

VOLCLAY[®] FD-181

General Description	Volclay FD-181 is a selectively mined and processed sodium bentonite with superior hydration and water holding capabilities.																		
Functional Use	Multi-purpose product noted for rapid dispersion in water. Employed in a number of agricultural applications, including as a pelleting aid.																		
Purity	Hydrous aluminum silicate comprised principally of the clay mineral montmorillonite. Contains minor amounts of feldspar and quartz.																		
Elemental Composition	Typical analysis – moisture free. <table><tr><td>SiO₂</td><td>63.02 %</td></tr><tr><td>Al₂O₃</td><td>21.08 %</td></tr><tr><td>Fe₂O₃</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>Na₂O</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 ₂	63.02 %	Al ₂ O ₃	21.08 %	Fe ₂ O ₃	3.25 %	FeO	0.35 %	MgO	2.67 %	Na ₂ O	2.57 %	CaO	0.65 %	Trace	0.72 %	LOI	5.64 %
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Moisture	Maximum 12% as shipped.																		
Bulk Density	Powder – 52 - 57 lbs./cu.ft. Granular – 58 - 65 lbs./cu.ft.																		
Water Holding Capacity	Volclay absorbs 5 times its weight of water, and at full saturation it occupies a volume 12 to 15 times its dry bulk.																		
Base Exchange	Typical base exchange ions or exchangeable cations (meq / 100g) <table><tr><td>Sodium</td><td>60 - 65</td></tr><tr><td>Calcium</td><td>15 - 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	15 - 30	Magnesium	5 - 20	Potassium	1 - 5										
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pH	8.5 - 10.5 @ 6% solids.																		
Packaging:	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