



Technical Data Sheet
Granular Sodium Bentonite

Revised: 09/10/02

VOLCLAY[®] CUSTOM GRANULAR

General Description	Volclay [®] Custom Granular is an evenly sized granular sodium bentonite with the fines removed. Average particle size is between 16 and 70 mesh.																		
Functional Use	For rapid liquid dispersion and for mixing with granular feed and mineral mixtures.																		
Chemical Formula	Dioctahedral 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 border="0" style="margin-left: 40px;"> <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	58-65 lbs./cu.ft.																		
Dry Particle Size	Maximum 1% retained on 16 mesh (1.18 mm) Maximum 35% retained on 20 mesh (850 μm) Maximum 3.5% passing 70 mesh (212 μm)																		
Base Exchange	Typical base exchange ions or exchangeable cations (meq / 100g) <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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pH	8.0 - 10.5 @ 5% solids.																		
Packaging	50 pound multi-wall paper bags, or bulk.																		