



## Technical Data Sheet

# Volclay<sup>®</sup> Premium Gel

## API Grade Bentonite

<b>Description</b>	Volclay <sup>®</sup> Premium Gel is a 200 mesh, 90 bbl. yield sodium bentonite for freshwater drilling. Complies with American Petroleum Institute drilling fluid specification 13A for bentonite.
<b>Functional Use</b>	May be used for all types of freshwater drilling.
<b>Purity</b>	Hydrous aluminum silicate comprised principally of the clay mineral montmorillonite. Contains small portions of feldspar, calcite, and quartz.
<b>Chemical Formula</b>	Diocahedral smectite, an expanding layer silicate: $(\text{Na,Ca})_{0.33}(\text{Al}_{1.67}\text{Mg}_{0.33})\text{Si}_4\text{O}_{10}(\text{OH})_2\cdot\text{NH}_2\text{O}$
<b>Advantages</b>	<ul style="list-style-type: none"><li>• Mixes quickly and easily.</li><li>• Stabilizes the borehole.</li><li>• Removes cuttings.</li><li>• Cools and lubricates the bit.</li><li>• Reduces fluid loss into the formation.</li></ul>
<b>Bulk Density</b>	Typically 54 lbs/ft <sup>3</sup>
<b>Moisture</b>	Maximum 12% as shipped.
<b>pH</b>	8.5 to 10.5 @ 5% solids.
<b>Dry Particle Size</b>	Minimum 65% passing 200 mesh (74 microns).
<b>Wet Particle Size</b>	Minimum 94% passing 200 mesh (74 microns). Minimum 92% passing 325 mesh (44 microns).
<b>Packaging</b>	Bulk or palletized in carload and truckload quantities. 100 lb & 50 lb multiwall, water-resistant bags or 2,000 lb bulk bags.