

**Food Grade
Bentonite**

Revised 08/13/01

VOLCLAY® KWK FOOD GRADE

General Description	Fine granular sodium bentonite with an average particle size between 20 and 70 mesh.																		
Functional Use	Used in the "fining" step of processing wine, juice, cider, and vinegar for the removal of suspended solids. Particularly useful in preventing cloudiness and removing heat-sensitive proteins.																		
Purity	Hydrous aluminum silicate comprised principally of the clay mineral montmorillonite. Volclay KWK Food Grade meets all requirements of the Food Chemical Codex.																		
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>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.																		
Dry Particle Size	Maximum 1.0% retained on 16 mesh. Maximum 35.0% retained on 20 mesh. Maximum 3.5% passing 70 mesh.																		
Wet Particle Size	Minimum 94% finer than 200 mesh (74 microns). Minimum 92% finer than 325 mesh (44 microns).																		
pH	8.0 - 10.5 @ 5% solids.																		
Free Swell	Minimum 20 mls per 2 grams clay.																		
Packaging	50 or 100 pound multi-wall paper bags, or bulk.																		