

**Sodium Bentonite**  
**Air Classified**

Revised 05/25/01

**VOLCLAY® HPM-20**

<b>General Description</b>	High-purity, air-classified sodium bentonite, selectively-mined, consisting of micronized particles and supplied as a free-flowing powder.		
<b>Functional Use</b>	This high-purity montmorillonite is typically used as a suspending agent, viscosifier, binder, and emulsion stabilizer.		
<b>Purity</b>	Hydrous aluminum silicate, air purified to concentrate the finest montmorillonite fraction from the bentonite ore. Contains traces of feldspar, quartz, calcite, and gypsum.		
<b>Solubility</b>	Insoluble in water or alcohol; one gram of clay produces a surface area greater than 750 sq. meters when fully dispersed.		
<b>Moisture</b>	12% maximum as shipped	<b>Texture</b>	Soft, slippery
<b>Viscosity</b>	8-30 cps @ 6.25% solids	<b>Odor</b>	None
<b>Spec. Gravity</b>	2.6	<b>Taste</b>	None
<b>Color</b>	Gray to Tan	<b>pH</b>	8.5-10.5 @ 2% solids
<b>Dry Particle Size</b>	Minimum 99.00% finer than 200 mesh (74 microns).		
<b>Wet Particle Size</b>	Minimum 99.75% finer than 200 mesh (74 microns). Minimum 99.00% finer than 325 mesh (44 microns).		
<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.		
	SiO <sub>2</sub>	69.56%	
	Al <sub>2</sub> O <sub>3</sub>	20.69%	
	MgO	2.70%	
	Fe <sub>2</sub> O <sub>3</sub>	4.85%	
	CaO	1.30%	
	Na <sub>2</sub> O	2.43%	
	K <sub>2</sub> O	0.30%	
	LOI	4.80%	
<b>Packaging</b>	5-ply multi-wall poly-lined bags, moisture-resistant, 50 pound net.		

**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