

## Hectalite<sup>®</sup> GM

**Application:** Binder, plasticizer in ceramics

**Grade:** Finely ground white calcium Hectorite

### TYPICAL ANALYSIS

<b>General Description</b>	Finely-ground, white calcium hectorite clay, exhibiting high cation exchange capacity, low thickening and good binding properties		
<b>Functional Use</b>	Used as a binder and plasticizer, especially in ceramic bodies, to ease extrusion and increase green strength with minimal viscosity increase.		
<b>Purity</b>	Composed principally of the clay mineral Hectorite. Impurities are dolomite, calcite & quartz.		
<b>Chemical Formula</b>	A trioctahedral smectite, an expanding layer silicate (Ca,Na) <sub>0.33</sub> (Mg <sub>2.66</sub> , Li <sub>0.33</sub> )Si <sub>4</sub> O <sub>10</sub> (F,OH) <sub>2</sub>		
<b>Brightness</b>	70 minimum	<b>Texture</b>	Soft, slippery
<b>Free Swell</b>	Minimum 24 mls	<b>Odour</b>	None
<b>Moisture</b>	12% maximum	<b>Taste</b>	None
<b>Viscosity</b>	50 cps maximum @ 5% solids	<b>Colour</b>	White to off-white
<b>Spec. Gravity</b>	2.6	<b>pH</b>	8.0 - 10.0 @ 2% solids
<b>Solubility</b>	Insoluble in water or alcohol; 1g of clay produces a surface area greater than 750 m <sup>2</sup> when fully dispersed		
<b>Dry Particle Size</b>	99.00% less than 200 mesh (74 micron)		
<b>Wet Particle Size</b>	99.75% less than 200 mesh (74 micron) 99.00% less than 325 mesh (44 micron)		
<b>Elemental Analysis (Moisture Free)</b>	SiO <sub>2</sub> 60.95%	Al <sub>2</sub> O <sub>3</sub> 1.61%	
	MgO 20.7%	Fe <sub>2</sub> O <sub>3</sub> 1.25%	
	CaO 12.27%	Na <sub>2</sub> O 0.95%	
	Li <sub>2</sub> O 1.29%	K <sub>2</sub> O 0.33%	
	LOI 9.90%		
<b>Packaging</b>	5 ply Multi-wall, poly lined, moisture resistant bags (25 kg)		

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