



**White Calcium Bentonite  
 Micronized**

Revised 05/25/01

**POLARGEL® CA**

<b>General Description</b>	A micronized white calcium bentonite that is selectively mined and supplied as a free-flowing powder. This specialty clay product is used in applications requiring light color and high solids loading.		
<b>Functional Use</b>	Applications where high solid levels and low viscosity are desired. Used as a binder and plasticizer to ease extrusion and increase green strength with minimal viscosity increase.		
<b>Purity</b>	Hydrous aluminum silicate composed principally of the clay mineral montmorillonite. Contains minor amounts of feldspar, calcite, and quartz.		
<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>	15% maximum as shipped	<b>Texture</b>	Soft, slippery
<b>Viscosity</b>	0-50 cps @ 5% solids	<b>Odor</b>	None
<b>Spec. Gravity</b>	2.6	<b>Taste</b>	None
<b>Brightness</b>	70 minimum	<b>pH</b>	7.0-10.0 @ 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: (Na,Ca) <sub>0.33</sub> (Al <sub>1.67</sub> Mg <sub>0.33</sub> )Si <sub>4</sub> O <sub>10</sub> (OH) <sub>2</sub> nH <sub>2</sub> O		
<b>Elemental Composition</b>	Typical analysis – moisture free.		
	SiO <sub>2</sub>	75.44 %	
	Al <sub>2</sub> O <sub>3</sub>	15.28 %	
	MgO	2.54 %	
	Fe <sub>2</sub> O <sub>3</sub>	1.65 %	
	CaO	2.29 %	
	Na <sub>2</sub> O	0.35 %	
	K <sub>2</sub> O	1.00 %	
	Lol	4.20 %	
<b>Packaging</b>	5-ply multi-wall poly-lined bags, moisture-resistant, 50 pound net.		

