

## Polargel<sup>®</sup> CA

**Application:** Suspending agent, viscosifier, emulsifier for a variety of applications

**Grade:** Powder

### TYPICAL ANALYSIS

<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 colour 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>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>Brightness</b>	70 minimum	<b>Texture</b>	Soft, slippery
<b>Moisture</b>	15% Maximum	<b>Odour</b>	None
<b>Viscosity</b>	0 - 50 cps @ 5% solids	<b>Taste</b>	None
<b>Spec. Gravity</b>	2.6	<b>pH</b>	7.0 – 10.0 @ 5% 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> 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%	LOI 4.20	
<b>Packaging</b>	5 ply Multi-wall, poly lined, moisture resistant bags (25 kg)		

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