



Civil Engineering Grade Bentonite

General Description:	Sodium activated bentonite which has been processed to enhance rheological properties for civil engineering applications.	
Composition:	Hydrous silicate of alumina comprised essentially of the clay mineral montmorillonite.	
Purity:	Montmorillonite content is 80% minimum. Contains small portions of feldspar, biotite, selenite, etc.	
Chemical Composition:	Typical Analysis (Moisture Free)	
	Silica (SiO ₂)	53.30%
	Aluminum (Al ₂ O ₃)	17.00%
	Iron (Fe ₂ O ₃)	5.55%
	Magnesium (MgO)	3.83%
	Sodium (Na ₂ O)	2.80%
	Calcium (CaO)	5.13%
	Potassium (K ₂ O)	0.90%
	Crystal Water (H ₂ O)	10.77%
	Trace Elements	0.72%
Chemical Formula:	A tri-layer expanding mineral structure of approximately: (Al Fe Mg) Si ₄ O ₁₀ (OH) ₂ Na ⁺ Ca ⁺⁺	
Moisture Content:	Maximum 15% as shipped	
Specific Gravity:	2.55 g/cc	
Dry Particle Size:	95% Minimum passing 150 micron	
pH:	5% suspension 10.0 – 10.5	
Dry Bulk Density:	801 – 881 kg/m ³	
Viscosity:	4% Solids 8.0 Centipoise Minimum (after 24 hours)	6% Solids 15.0 Centipoise Minimum
10 Minute Gel Strength:	7.2 N/m ² (after 24 hours)	21.6 N/m ²
Packaging:	25 Kg Paper bags, 40 Bags per pallet. All pallets are shrink-wrapped.	