Technical data sheet

Chemical product name	Super Absorbent Polymer	
CAS No./ HS-Code	**CAS#: 31212-13-2; H.S CODE#: 3906909090**	
Chemical main element	Potassium, Poly-acrylate Copolymer	
Appearance	White granule	
Nutrient Content	K_2O; min.23%	
Average particle size	0.1-0.125mm(16~80mesh)	1.0-2.5mm(8~18mesh)
Solubility	insoluble in water and organical solutions; swells to a gel upon contact with aqueous fluids	
pH-Value (1g/l/H_2O)	neutral	
Maximum Absorption Free swelling conditions 0.125% N-P-K; 20-10-02	600ml/G	
Absorption Against Soil Pressure >Use conditions in soil< 0.125% N-P-K; 20-10-02	Applying 0.2% SAP in red soil, the saturated soil moisture content is 64.94%, which increased 22.31% than control, the available soil water content is 41.35%, which increased 36.47% than control; Applying 0.2% SAP in sandy soil, the saturated soil moisture content is 34.78%, which increased 32.60% than control, hte available soil water content is 30.90%, which increased 37.7% than control;	
Water available for plants	Under 0.3Mpa suction section, it's the aptest to utilize moisture by plant	
Effectiveness in soils	It can notably imporve soil structure, reduce soil bulk density and increase the soil porosity.In red soil, applying 0.1%,0.2%,0.4%, the soil bulk density decreased 7.33%,11%, 14.68%; in sandy soil, applying 0.1%,0.2%,0.4%, the soil bulk density decreased 9.35%,12.95%, 15.11%, but two soil porosity increase with the increasing of SAP.	
Sphere of temperature	no exact data	
Toxicology/ Ecology	non toxic for plants, soil organism	
Residual Monomers (mg/kg) Acrylate Acrylic Acid	No exact data	
Application	Soil Hydration. Agriculture	
Safety certificate	**ISO14001:2015; ISO9001:2015**	