

GlucoSol® 620

GlucoSol® 620 is a new entry in the Chemstar water-soluble product line. It is a highly substituted natural polysaccharide designed to impart enhanced functional properties including: solution stability, salt tolerance, surface activity, water retention, improved rheology and viscosity.

GlucoSol® 620 offers a unique alternative to competitive natural and synthetic water-soluble polymers

Advantages

- Rheology modification
- Thickening
- Water retention
- Anti-sag
- Bond/Adhesion
- Open time/ Working time
- Enhanced workability, slip
- Decrease stickiness
- Crack Resistance
- Surface Hardness
- Extended Coverage

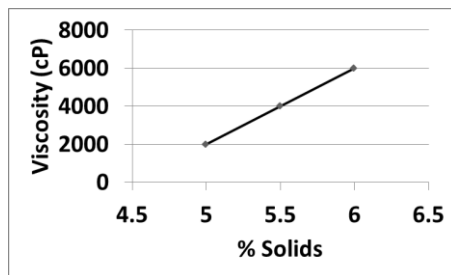
Main Applications

- Joint Compounds
- Spray Textures
- Plasters

Appearance

GlucoSol 620 is an off-white powder. Aqueous solutions are translucent and demonstrate excellent stability

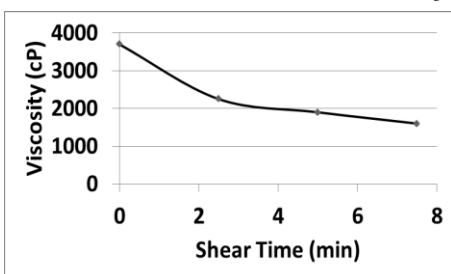
Effect of Solids Concentration on Viscosity



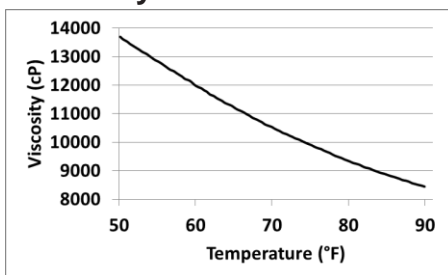
Solution Preparation

GlucoSol 620 is easy to disperse and solubilize in water with minimal agitation. Agitation should be maintained for a period of about 30 minutes to ensure complete hydration of the polymer. The time and amount of agitation required will vary with solids concentration of the polymer. High solids and cold water make-up may necessitate longer mix times.

Effects of Shear on Viscosity



Effect of Temperature on Viscosity

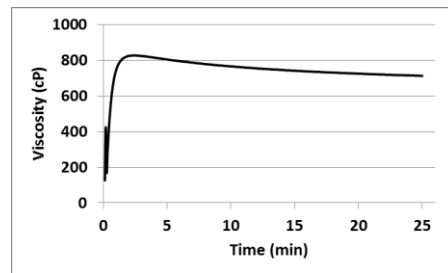


Solution Preservation

The chemical substitution of GlucoSol 620 provides enhanced solution biostability. Extended storage could result in viscosity reduction due to microbial or enzymatic attack. Stored solutions should be protected by the use of a preservative. GlucoSol 620 is also available with a preservative treatment.

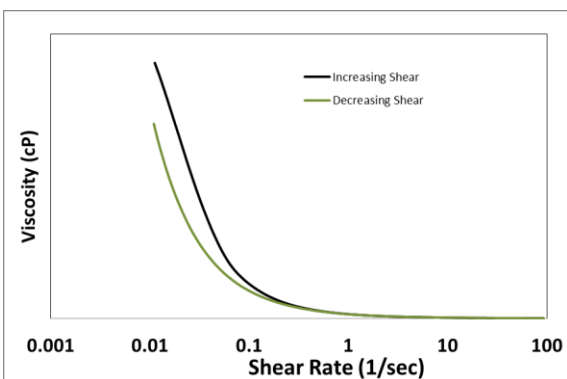
Unique Hydration

GlucoSol 620 exhibits a distinct hydration profile to allow the individual particles to briefly wet-out prior to rapid hydration of the polymer. This feature eliminates the formation of gel agglomerates typical of other water-soluble polymers.



Thixotropy

Solutions of GlucoSol 620 exhibit near pseudoplastic behavior. Viscosity decreases with increasing shear and when the shear is removed the original viscosity is immediately recovered. Thixotropic solutions regain their original viscosity with a time element



Storage, Handling, and Safety

GlucoSol 620 exhibits excellent storage stability if kept dry in its original package. Shelf life can be affected by storage conditions such as temperature, humidity, and overall surroundings of the storage area. A Safety Data Sheet is available and should be consulted prior to handling or use.

Availability

GlucoSol 620 is available in 50 lb. multi-wall poly-lined paperbags or 2000 lb supersacks for truckload and LTL shipments. Please contact Chemstar for additional information, samples or technical assistance in using this or any other Chemstar product.

Typical Analysis

GlucoSol 620	
Viscosity (cP), 6% Solids LVT, 60 RPM, #4 Spindle	4000 – 7000
Percent Moisture (%)	10 max
Bulk Density (lb/ft ³)	30 – 40
Particle Size (% thru)	95 Min (-) 105 Micron

Typical Addition Rates

GlucoSol 620	
Spray Texture	0.10 – 0.50

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