

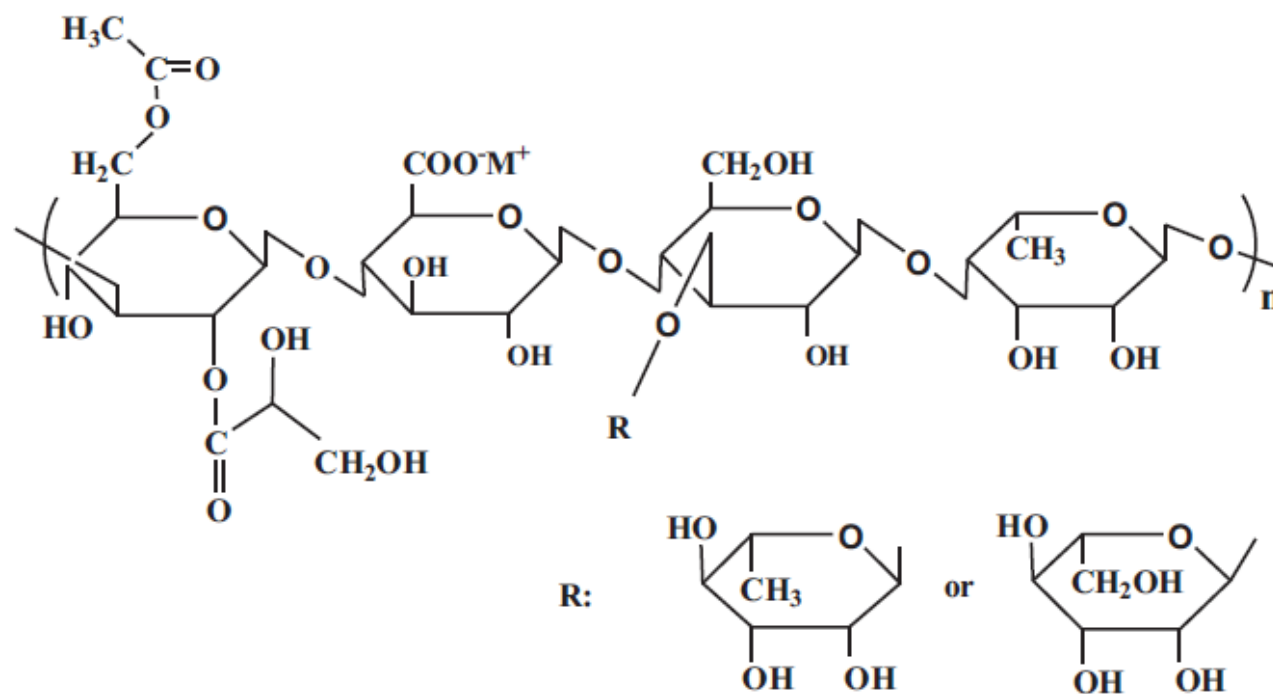
A light gray world map is visible in the background, centered behind the text.

Welan Gum

Cement Chem

2019

Welan Gum is a microbial biopolymer produced by fermentation of sugar by bacteria of the genus *Alcaligenes*. The molecule consists of repeating tetrasaccharide units with single branches of L-mannose or L-rhamnose.



Molecular structure of Welan Gum

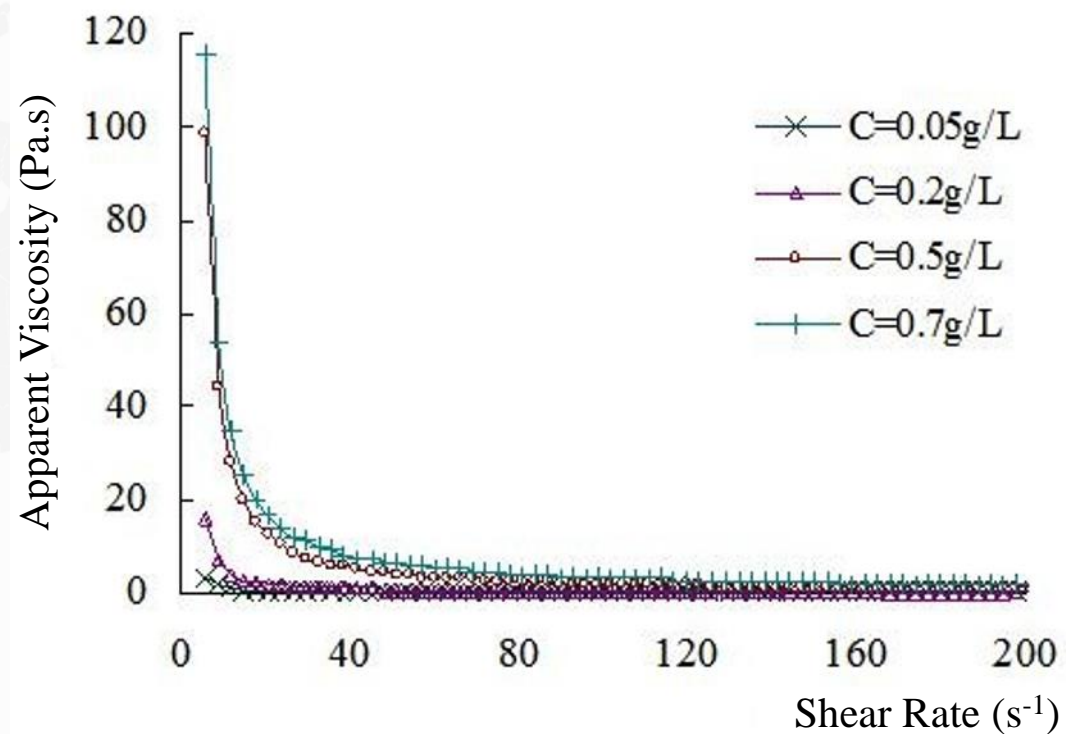
Advanced Properties of Welan Gum

- ✓ **Excellent thermal stability.**
- ✓ **Superior shear-thinning property**
- ✓ **Releases viscosity rapidly in water**
- ✓ **Thickens, suspends, and stabilizes water-based systems**
- ✓ **Retention of viscosity at elevated temperatures.**
- ✓ **Stable over a wide range of pH and temperature.**
- ✓ **Compatible with high calcium environments.**
- ✓ **Non-toxic**

Applications

- PD Welan Gum thickens, suspends, and stabilizes water-based systems while imparting excellent rheological control.**
- In DRILLING FLUID application, PD Welan Gum can be used to maintain the viscosity of water-based drilling fluid and control its rheological properties.**
- In CEMENTING application, PD Welan Gum can be used to enhance water retention and improve stability.**

Excellent Shear-thinning Property

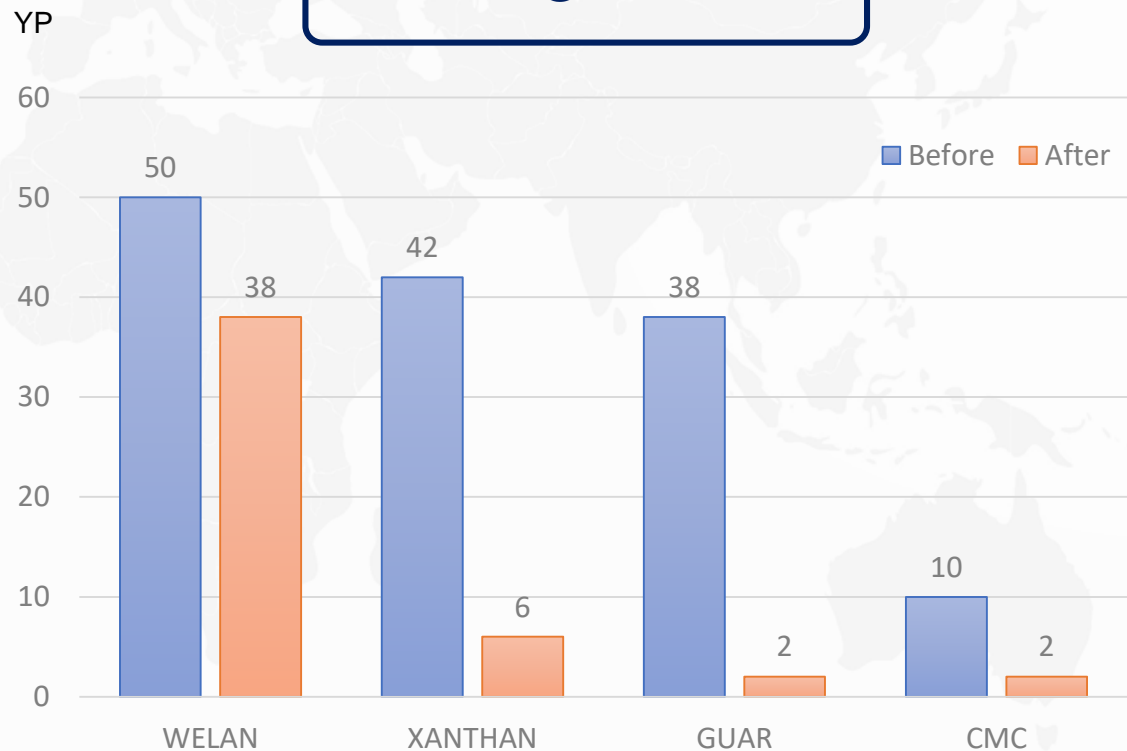


High Viscosity

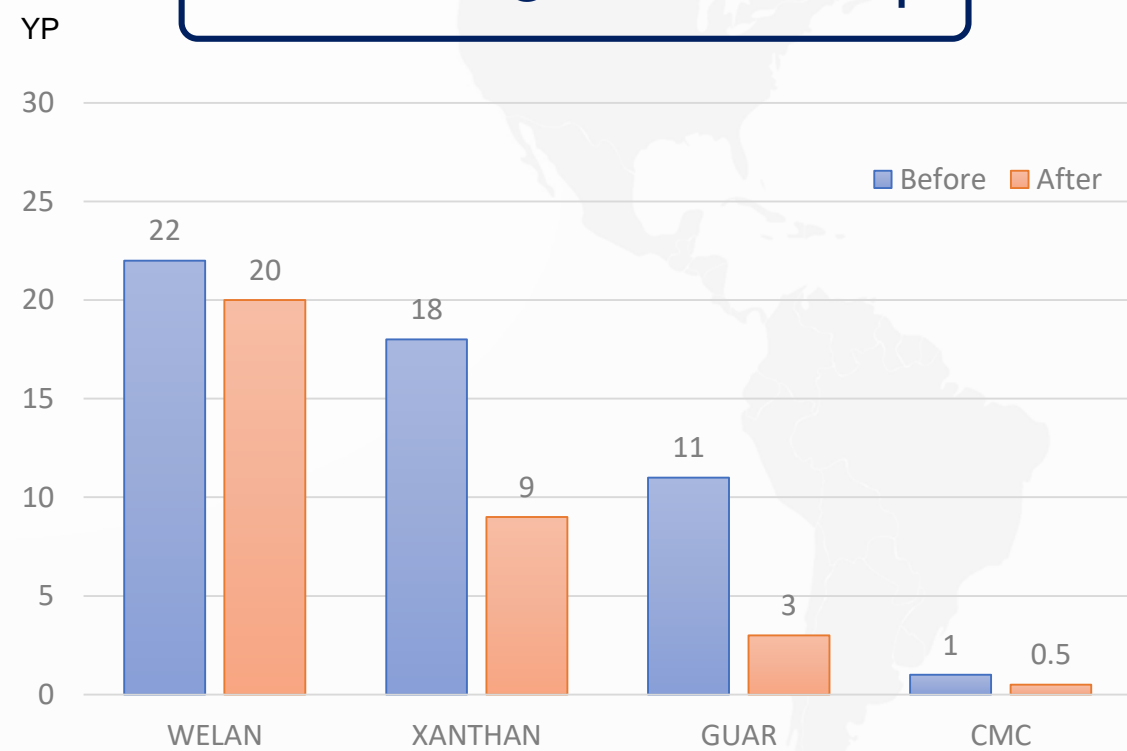
Concentration / Solution	Test Equipment	Viscosity(mPa.s)				
		Welan	Xanthan	CMC	Guar	PAM
1ppb / salt solution	Fann-35	20	16	1	1	0
0.25% / distilled water	Brookfield	1020	610	50	22	0

Excellent Thermal Stability

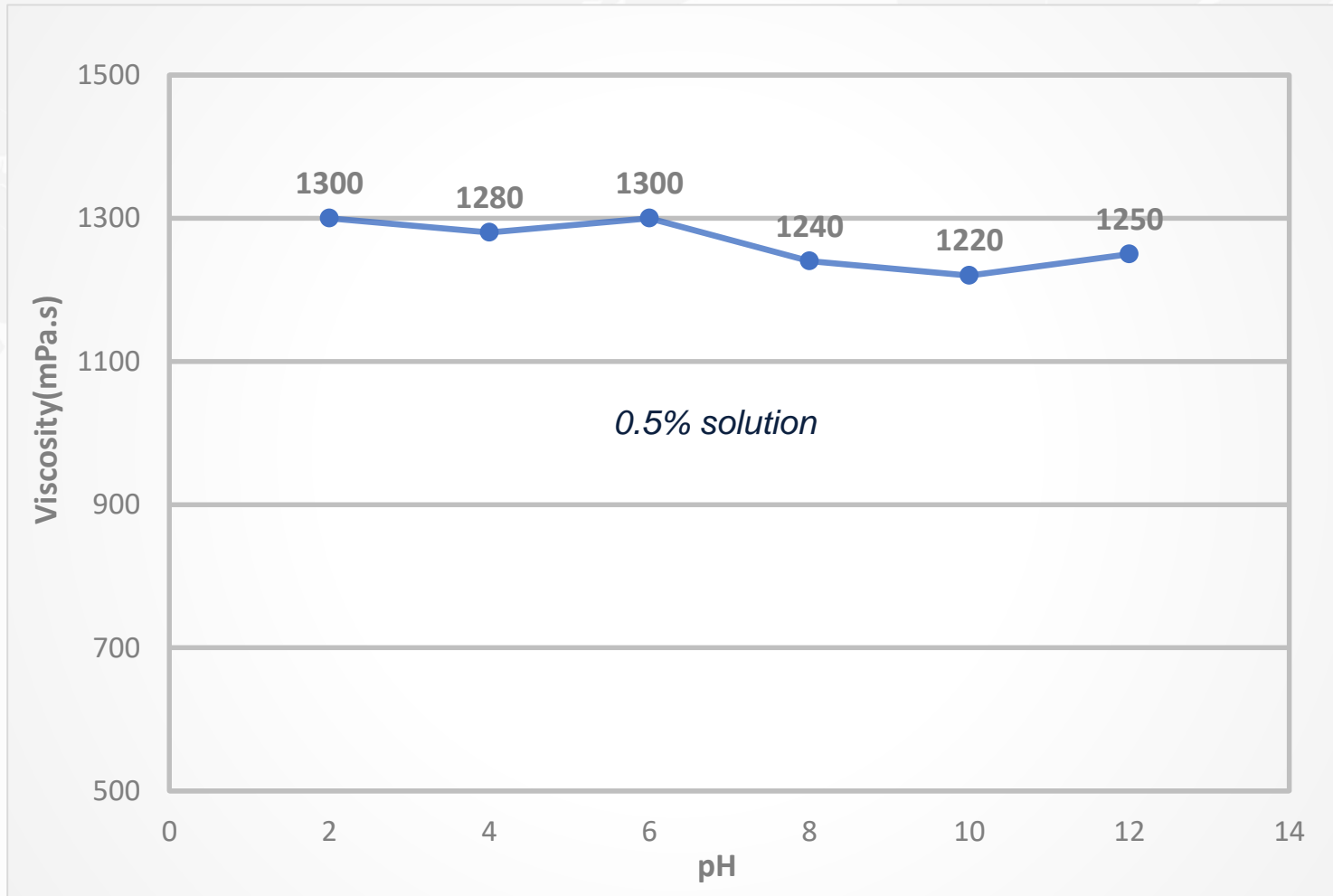
sea water @135°C for 16h



distilled water @85°C for 30min 3rpm



Stable Over Extreme pH Conditions



Contact Information

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