

# WG-33L Water Gelling Agent



## Applications:

**WG-33L** is a guar derivative which extends the capabilities of regular guar gum material. Carboxymethyl hydroxypropyl guar (CMHPG) exhibits faster hydration and greater thermal stability than regular guar. WG-33L has dual cross-linking capabilities, allowing for a cross-link at high and low pH ranges. A number of transition metals including zirconium, aluminum, titanium and antimony, can cross-link the polymer producing a highly viscous water-based fluid with excellent sand suspension capabilities, even in the presence of liquid carbon dioxide.

WG-33L is normally run between 7.5 GPT and 10 GPT.

## Properties:

Appearance ..... Tan to light yellow liquid  
Density ..... 8.51 lbs/gal  
Solubility ..... Soluble in water and brines

## Advantages:

- Derivatized form of guar (CMHPG).
- Rapid hydration.
- Liquid addition allows for on-the-fly applications.
- Gels methanol water systems up to 50%.
- Can be crosslinked with a zirconium solution (Liberty LCL-61 and LCL-62).
- Reduces fluid leakoff.

## Limitations:

- WG-33L polymer precipitates with methanol concentrations over 50%.
- WG-33L polymer is susceptible to biological degradation.

## Handling Precautions:

- Minor irritation may result on skin if exposed.

## Mixing & Blending Instructions:

- WG-33L should be added to the suction side of the blender or other high shear mixing devices.
- Lowering the pH to ~4 will speed up gel hydration.

