

# Flowzan<sup>®</sup> Biopolymer



A DIVISION OF CHEVRON PHILLIPS  
CHEMICAL COMPANY LP

Flowzan<sup>®</sup> Biopolymer is a high-purity, high-performance xanthan gum biopolymer utilizing unique, patented dispersion chemistry which significantly enhances product dispersion and solubility and reduces the formation of fisheyes.

## Advantages

- Excellent viscosifier – requires less material than other xanthan' s
- Excellent suspension characteristics and rheology control
- Produces shear thinning fluid for optimum penetration rates
- Performs well in fresh water, seawater, brine and saturated salt environments
- Rapid dispersion without fisheyes
- Minimizes formation damage
- Helps maintain the integrity of cuttings
- Reduces circulating pressure losses
- Effective friction reducer in coil tubing applications

## Flowzan<sup>®</sup> Polymer

Application	Material Needed
Horizontal drilling & completions	0.25 to 2.0 ppb (0.7 to 6.0 kg/m <sup>3</sup> )
Drill-in fluids	0.25 to 2.0 ppb (0.7 to 6.0 kg/m <sup>3</sup> )
Drilling large-diameter well bores	0.50 to 2.0 ppb (1.4 to 6.0 kg/m <sup>3</sup> )
Fresh water, salt water & brine-based fluids	0.25 to 2.0 ppb (0.7 to 6.0 kg/m <sup>3</sup> )
Coring fluids	0.25 to 2.0 ppb (0.7 to 6.0 kg/m <sup>3</sup> )
Improved hole cleaning	0.5 to 5.0 ppb (1.5 to 14.0 kg/m <sup>3</sup> )
Solids Free Completion & workover fluids	0.50 to 2.0 ppb (1.4 to 6.0 kg/m <sup>3</sup> )
Gravel packing operations	1.0 to 2.0 ppb (2.0 to 6.0 kg/m <sup>3</sup> )
Clean perforating fluids	0.25 to 2.0 ppb (0.7 to 6.0 kg/m <sup>3</sup> )
Cross linked profile modification	1.0 to 2.0 ppb (3.0 to 6.0 kg/m <sup>3</sup> )
15% hydrochloric acid viscosifier	1.5 to 2.5 ppb (4.0 to 7.0 kg/m <sup>3</sup> )
Coiled tubing friction reducer	0.20 to 0.50 ppb (0.6 to 2.0 kg/m <sup>3</sup> )

## Cost

Extremely efficient dispersion and dissolution, along with high inherent viscosity development, make Flowzan<sup>®</sup> Biopolymers highly cost effective

## Mud Types:

All known water-based formulations, drill-in, completion and workover fluids.

## Mixing Requirements

Mix slowly through conventional jet hopper.

## Handling

For specific instruction on handling refer to the MSDS.

## Packaging

Flowzan<sup>®</sup> Biopolymer: 25-pound, multiwall paper sacks

Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Drilling Specialties Company does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user.