



# BIOVIS

## XANTHAN GUM VISCOSIFIER

### DESCRIPTION

BIOVIS is a high molecular weight biopolymer, a high-purity xanthan gum produced by the action of a micro-organism, *xanthomonas campestris*, on carbohydrates. BIOVIS is primarily a viscosity modifier for fresh to salt saturated make-up waters and is compatible with all water base drilling fluid additives.

Solutions of BIOVIS exhibit pseudoplastic rheological properties [i.e., the viscosity of the fluid will decrease with shear (e.g., at the bit nozzle) and immediately revert back to the original viscosity when shear is removed (e.g., in the annulus)]. Moreover, the viscosity of BIOVIS drilling fluids remains nearly constant from below freezing to 300° F static bottom hole temperature, in a pH range of 3 to 12 and, the product is non-toxic as well as biodegradable.

Description	Pure Xanthan Gum
Appearance	Free-flowing off-white to cream colored powder.
Active Content	100% Xanthan (less moisture)
Specific Gravity	approx.1.50 (@ 20° C)
Solubility	Readily soluble in water,

### APPLICATION

BIOVIS will build viscosity and gel structure in all water base systems. An outline of the advantages of this product are as follows:

- Since a very small quantity of BIOVIS is required to prepare a drilling fluid (e.g., 1 ppb compared to 20-25 ppb of bentonite), there is a tremendous saving in transportation, storage, etc.
- Low solids - high penetration rate drilling fluids can be prepared.
- Optimum hole cleaning and suspension qualities are obtained.
- The lack of particulate plugging and non-film forming characteristic has proven BIOVIS fluids to be excellent as a workover or completion fluid.

### RECOMMENDED TREATMENT

From 0.5 to 1.5 ppb (1.4 to 4.2 kg/m<sup>3</sup>) to develop viscosity and gel strength. BIOVIS should be added slowly (20 to 30 minutes per lb bag) through the mud hopper utilizing maximum shear.

### PACKAGING

BIOVIS is packaged in 50 lb or 25 kg net heavy duty, Polyethylene-lined bags.

BIOVIS is a Messina trademark