

# MILLZAN D VISCOSIFIER

**MILLZAN D** is a dispersible, high molecular weight xanthan biopolymer used for rheology control in waterbased systems. MILLZAN D is used primarily as a viscosifier in fresh water, seawater or saline muds, from low solids to highly weighted systems. It will enable optimum rheology control through superior low shear rate viscosity and is highly shear-thinning.

#### FEATURES AND BENEFITS:

- Easily mixed to provide rheological properties for improved hydraulics. This includes minimum friction pressures for additional hydraulic horsepower at the bit for maximum ROP's.
- The same rheology promotes laminar flow in the annulus for increased borehole stability with maximum solids transport capacity.
- Will function in fluid temperatures up to 138°C. The addition of 3% salt and an oxygen scavenger will improve temperature stability in fluids from 94°C to 138°C.

#### **RECOMMENDED TREATMENT:**

Primary viscosifier in a low colloid system: 3-6 kg/m<sup>3</sup> Extremely high transport requirements: up to 12 kg/m<sup>3</sup>

The amount of MILLZAN D required will depend on the effective viscosity or friction pressure reduction needed.

### **PHYSICAL PROPERTIES:**

Appearance:	White to tan powder
Specific Gravity:	1.4 – 1.6
Solubility:	Soluble
pH:	7.0 (1% solution)

#### **MIXING/HANDLING:**

Mix slowly through the hopper to avoid lumping or 'fish eyes"; disperses in water with moderate agitation. MILLZAN D is slightly anionic and therefore special mixing procedures must be used when mixed with cationic materials. Trivalent ions such as chromium may cause biopolymer precipitation and loss of viscosity. Refer to the SDS for specific precautions and handling requirements.

## MICROTOX<sup>®</sup> THRESHOLD: TBD

### PACKAGING: 25 kg bags / 40 bags/pallet