

Drilling Fluids - Specialty Products

Xan Gum



Product Number: 9410040

Applications

The primary function of Xan Gum is to increase viscosity for cuttings transport and suspension. Xan Gum will perform effectively in all water-base fluids, from highly weighted to low-solid systems. This includes freshwater, seawater, salt and heavy brine systems.

Shear-thinning fluids containing Xan Gum have low effective viscosities at the high shear rates encountered inside the drill string and at the bit. This low effective viscosity for minimal pressure losses and standpipe pressures allows optimized hydraulics and maximized rates of penetration. Conversely, at the low shear rates experienced in the annulus, Xan Gum enables the drilling fluid to have a high effective viscosity for adequately cleaning the well and suspended cuttings.

Advantages

Xan Gum is a highly effective low shear rate viscosifier for improved hydraulics and power at the bit for maximum penetration rates.

XAN GUM is a biopolymer used for increasing viscosity in water-based systems. Small additions provide viscosity and weight-material suspension for all water-based mud systems. Xan Gum has the unique ability to produce a fluid that is highly shear-thinning (LSRV).

Method of Addition

Xan Gum should be added slowly through the hopper to prevent lumping and minimize water. It should be added at the rate of approximately 2 lb (0.91 kg) every 2 min. The time required for the product to yield its ultimate viscosity depends on salinity, temperature and shear.

The amount of Xan Gum required will depend upon the desired viscosity. Normal concentrations range from 0.25 to 2 lb/bbl (0.71 to 5.7 kg/m³) for most mud systems. Special fluids and difficult hole-cleaning conditions may require higher concentrations up to 4 lb/bbl (11.4 kg/m³).

Typical Physical Properties

Physical appearance	cream to tan powder
Specific gravity	1.5
Bulk density	50 lb/ft ³ (800kg/m ³)

Packaging and Storage

Xan Gum is packaged in 25 lb/11.3 kg bags.

Store in a well-ventilated area away from sources of heat or ignition.

