

## PRODUCTS TECHNICAL DATA

**PRODUCT NAME :** **ME XP-10** ,Fluid-loss additive in high temperature

### **COMPOSITION / INFORMATION ON INGREDIENTS AND APPLICATIONS**

**ME XP-10** This filtration control agents is a kind of oil-base mud modified Gilsonite.

It can inhibit the dispersion of drilling cuttings, control HTHP filtration, produce thin and dense mud cake, maintain low shear rate under HTHP, reduce the transmission of pore pressure and seal micro fractures and low porosity sand. Keep formation integrity and develop effective filter cake. Because the decomposition temperature of the product is as high as 500 °F, highly-dispersive and fractured shales with sloughing tendencies, hard, brittle shales in which moderate dispersion exhibits severe sloughing, a high-strength adsorption membrane is formed on the surface of mud cake. The plugging principle is used to reduce the permeability of mud cake, improve the quality of mud cake and reduce the filtration loss.

**ME XP-10** can resistant to high formation temperature up to 500F° ,it have been widely used for many OBM to stabilize sloughing shales to reduce borehole erosion. It is proposed that the material, added to a OBM system prior to encountering a problem shale, would penetrate the shale pore spaces, microfractures, and bedding planes as the bit is penetrating the formation. By a plastic-flow mechanism, **ME XP-10** would extrude into the pores, fractures, and bedding planes to reduce or minimize filtrate and whole mud invasion, and thus bond the matrix to prevent sloughing. In the report of CNPC that contained photomicrographs of drilled cuttings and cores which showed **ME XP-10** extruding into pore spaces and fractures. In addition, it has been proposed that **ME XP-10** plates out on the borehole wall, creating a thin film. However, penetrate deeper into the fractures, due to their high solubility, and do not "plate" as well as the insoluble products.