

## Technical Data Sheet

### **MS-100**

#### ***Mutual Solvent***

#### **DESCRIPTION**

MS-100 is a multi-functional surfactant additive designed for use in acid stimulation treatments. As a mutual solvent it is soluble in oil, acid and water.

MS-100 acts as a water wetting agent, a demulsifier and an interfacial tension reducer. It will effectively penetrate, as deep in the formation as the treating fluid, it tends to dissolve the oil film on fines released by the reaction of the acid on the formation. MS-100 leaves formation fines and pore surfaces water wet. Formations that are water wet have little tendency to stabilize emulsions,

MS-100 primarily has been used in sandstone acidizing treatments to prevent surfactant adsorption from the acid to the formation rock's surface.

MS-100 can also be used in matrix acidizing of limestone formations and in producing wells or injection wells. It can be used in oil, hydrochloric acid, hydrochloric-hydrofluoric acid or organic acids in treating wells with bottom-hole static temperatures up to 350°F.

#### **APPLICATION**

Use 5% MS-100 in a preflush volume, 7.5% to 10% where the clay content of the formation is high (greater than 10%).

In conjunction with HCL-HF acid MS-100 when used at 5% will do a remarkable job. Increase concentration for high matrix clay content

MS-100 can be used in hydrocarbons as an after flush to HCL-HF acid treatments. Normal dosage is 5%. Make sure the after flush is compatible with unspent HCL-HF acid.

#### **SPECIFICATIONS**

Appearance..... Clear Liquid  
Flash Point..... 66°C (150°F)  
Specific Gravity.....0.8-0.9  
Density..... 6.66-7.50 lb/gal  
pH (neat)..... 5.0-10.0

#### **ADVANTAGES**

- Highly effective water wetting agent
- Surface properties help to demulsify crude oil
- Reduces surface and interfacial tension
- Aids acid injection for matrix treatment
- Improves clean-up after treatment