



TECHNICAL
INFORMATION
SHEET

FRANKLIN WELL STIM STIMULANT

The use of surfactants in acidizing and water based fracturing fluids is important in fluid entry, recovery and subsequent clean up of treating fluids. Franklin's Well Stim is a unique multifunctional nonionic surfactant. It is a micellar solvent that is soluble in oil, acid, and water. It functions as a surfactant because it lowers the surface tension of the water and acid and also lowers the interfacial tension between acid (or water) and oil.

One of the primary values of Well Stim lies in its effect on clays. Being a mutual solvent, it tends to remove oil films from clay particles. This can change the wettability of the clay leaving it preferentially water wet. Formation fines that are water wet do not tend to stabilize the common water in oil type emulsions. In water or oil solutions it acts to break emulsions and water blocks.

In acid, Well Stim improves the reaction of the acid as it comes in contact with the formation, accelerates the cleanup of spent acid and minimizes and reduces the chance for emulsions to form.

In the fracturing fluid, it can be spear headed or ran throughout the treatment to enhance fluid recovery.

It has shown to be very effective in removing damage caused by emulsions, water blocks, reservoir fines, and drilling mud while leaving the reservoir water wet.

Normal volumes of Franklin's Well Stim are 5% to 10% by volume.

Product Benefits:

- Excellent water wetting properties
- Increase reservoir penetration
- Very low surface tension
- Increase silt suspension
- Improved load recovery
- Removes water blocks