



P-NSL2

STIMULATION TECHNICAL BULLETIN

10/18/05

P-NSL2 (PETROCHEM-NONIONIC SURFACTANT LIQUID)

P-NSL2 is a nonionic surfactant liquid, which is pourable to temperatures as low as 42°F and is a highly effective wetting agent in water or in acid based stimulation fluids. It also has the desirable characteristic of leaving both limestone and sandstone water-wet.

P-NSL2 lowers injection pressures and improves the return of treating fluids by reducing the surface and interfacial tensions of treating solutions. It is recommended for water injection wells where high injection rates are desired while maintaining acceptable injection pressure. It also finds application as a foaming agent in air drilling operations or in clearing wells that have been killed with water.

The recommended concentration of P-NSL2 varies depending on the application. In stimulation fluids: 2-10 gal/1,000 gal fluid. For continuous treatment of injection water: 20 ppm or 1.4 pt/1,000 gal. For intermittent treatment of injection water: 1,000 to 10,000 ppm or 10 gal/1,000 gal. As a foaming agent in water or brine: 1 to 5 gal/1,000 gal.

MIXING

P-NSL2 surfactant is easily handled. It dissolves easily in water, brines and acids and can be adequately mixed by agitation with air or paddles.

PHYSICAL PROPERTIES

<u>PRODUCT</u>	<u>FORM</u>	<u>FLASH POINT</u>	<u>SP.GR.</u>	<u>PACKAGING</u>
P-NSL2	CLEAR LIQUID	282 C.	1.057	55 GAL/DRUM

SAFETY

Before using P-NSL2 be sure to consult the Material Safety Data Sheet (MSDS).