



P-NSL4

PRODUCT DATA SHEET

1/10/22

P-NSL4 (PETROCHEM - NONIONIC SURFACTANT LIQUID 4)

TECHNICAL DATA

- **P-NSL4** is a nonionic (cement spacer) 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 waterwet.
- **P-NSL4** 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.
- **P-CWL2** is used to prepare chemical wash spacers for both water based and oil-based mud systems. The addition of **P-NSL4** is required at a concentration of 1-2 gallons per barrel of **P-CWL2** to make the chemical wash liquid compatible with an oil-based mud system. **P-NSL4** surfactant is easily handled and it dissolves easily in water, brines and acids and can be adequately mixed by agitation with air or paddles.

PROPERTIES

- Appearance: Yellow (Liquid)
- Specific Gravity: 1.057
- Temperature Range: No Limit

RECOMMENDED TREATMENT

- The recommended concentration of **P-NSL4** varies depending on the application.
- In stimulation fluids: 210 Gallons per 1,000 Gallons of fluid.
- For continuous treatment of injection water: 20 ppm or 1.4 pt. per 1,000 Gallons.
- For intermittent treatment of injection water: 1,000 to 10,000 ppm or 10 Gallons per 1,000 Gallons.
- As a foaming agent in water or brine: 1 to 5 Gallons per 1,000 Gallons.
- For Use in Oil-Based Mud systems: Add 1-2 Gallons of **P-NSL4** per barrel of chemical wash to achieve compatibility.
- Compatibility testing is highly recommended prior to use in the field.

PACKAGING

- **P-NSL4** is packaged in 55-gallon (208L.) drums, 5-gallon (19L.) Pails & 265-gallon (1,000L.) Totes.

SAFETY

- Read the SDS before use.