

POLYPAC ELV extralow-viscosity polyanionic cellulose additive

Reduces fluid loss

Applications

POLYPAC ELV* extralow-viscosity polyanionic cellulose additive controls fluid loss in freshwater, seawater, salt, and KCl drilling fluids while providing supplemental shale inhibition. The additive is primarily used in weighted systems to avoid an uncontrollable viscosity buildup.

How it improves wells

POLYPAC ELV additive forms a thin, resilient low-permeability filtercake that minimizes the potential for differential sticking. Because of its extremely low viscosity, the additive can be used at higher concentrations than POLYPAC UL* ultralow-viscosity polyanionic cellulose to provide additional benefits in HPHT fluid-loss control and shale control with minimal viscosity increase. Systems that depend solely on POLYPAC ELV additive tolerate higher levels of low-gravity solids (LGS).

The properties of the additive make it ideally suited for drilling high-angle, extended-reach wells through reactive shales, particularly when combined with a highly shear-thinning rheology control polymer such as DUO-VIS* biopolymer viscosifier. POLYPAC ELV additive is the preferred fluid loss agent for the GLYDRIL* advanced polyglycol system, as well as in other nondispersed drilling fluid systems such as POLY-PLUS* high-molecular-weight liquid clay inhibitor systems and saturated salt systems.

Advantages

- Excellent fluid-loss additive and filtercake quality enhancer for use in nondispersed systems
- Provides shale control and lubricity with minimal viscosity increase
- Resists bacterial attack; no biocide or preservative is needed
- Suitable for extended-reach drilling and deepwater drilling when used with DUO-VIS viscosifier
- Effective across a wide pH range

Limitations

- Circulating temperature stability of approximately 300 degF [149 degC]
- Effective in systems with total hardness level <1,000 mg/L as calcium but can be precipitated in conditions of high hardness and high pH

Toxicity and handling

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions as described in the safety datasheet.

Packaging and storage

POLYPAC ELV additive is packaged in 50-lbm [22.7-kg] multiwall paper sacks.

Store in a dry location away from sources of heat or ignition and minimal dust.

Physical Properties

Physical appearance	Free flowing, white powder
Specific gravity	1.5–1.7
pH, 1% solution	6–8.5