

POLYPAC R

Polyanionic-cellulose filtration-control additive

APPLICATIONS

- Control fluid loss and increase viscosity in water-based muds.

ADVANTAGES

- Effective in low concentrations for controlling fluid loss and building viscosity
- Encapsulates shale particles to inhibit swelling and dispersion
- Resists bacterial attack, requiring no biocides or preservatives
- Functions over a wide range of salinity, hardness, and pH levels
- Applicable in all water-based muds, ranging from low-solids, nondispersed polymer systems to high-density, dispersed systems
- Compatible with all common mud-treating additives
- Excellent environmental acceptability

LIMITATIONS

- Circulating temperature stability of approximately 300 degF [149 deg]
- Effective in systems with total hardness <1,000 mg/L (as calcium) but can be precipitated in the combined presence of high hardness and high pH

Applications

POLYPAC R* polyanionic-cellulose filtration-control additive controls fluid loss in freshwater, seawater, KCl, and salt muds. The polymer forms a thin, resilient, low-permeability filtercake that minimizes the potential for differential sticking and the invasion of filtrate and mud solids into permeable formations.

The additive resists bacterial attack, eliminating the need for biocides or preservatives. It is effective in low concentrations, with the normal treatment ranging from 0.25 to 1 lb/bbl [0.71 to 2.85 kg/m³]. The additive also develops viscosity to a degree that is dependent on the solids concentration, salinity, and makeup water chemistry.

POLYPAC R additive attaches to and encapsulates exposed shales and drill cuttings. This protective polymer envelope inhibits the dispersion of shale cuttings and restricts fluid interactions with exposed shales.

Toxicity and handling

Bioassay information is available upon request. Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the MSDS.

Packaging and storage

POLYPAC R additive is packaged in 50-lb [22.7-kg] and 55-lb [25-kg] heavy-duty multiwall waterproof sacks. Store in a dry, well-ventilated area away from incompatibles or sources of heat or ignition.



Typical Physical Properties

Physical appearance	White, free-flowing powder
Specific gravity	1.5–1.6
pH (1% Solution)	6.5–8.0