Product Bulletin

PLATINUM PAC UL

Certified to NSF/ANSI 60

PLATINUM PAC UL polyanionic cellulose (PAC) is a high-quality, water-soluble polymer designed to control fluid loss. Because it is an "ultra-low" (UL) additive, it causes a minimal increase in viscosity in water-base muds. PLATINUM PAC UL additive is readily dispersible in a wide range of water-base mud systems.*

Typical Physical Properties

Physical appearance	Free-flowing white powder
Specific gravity	1.5–1.6
pH (1% solubility)	6.5–8.0

Applications

PLATINUM PAC UL additive controls fluid loss in freshwater, seawater, KCl, and salt muds. It forms a thin, resilient, low-permeability filter cake that minimizes the potential for differential sticking and the invasion of filtrate and mud solids into permeable formations. PLATINUM PAC UL additive resists bacterial attack, eliminating the need for biocides or preservatives. It is effective in low concentrations, with the normal fluid-loss treatment ranging from 0.25 to 1 lb/bbl (0.71 to 2.85 kg/m^3). In saltwater and PAC-polymer systems, higher concentrations are required for encapsulation, with normal concentrations ranging from 1 to 3 lb/bbl (2.85 to 8.6 kg/m^3).

Because PLATINUM PAC UL additive is low viscosity, it generates less viscosity as compared to the POLYPAC* and PLATINUM PAC products. The viscosity generated depends on the solids concentration, salinity, and makeup-water chemistry.

PLATINUM PAC UL anionic polymer 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.

In saturated salt systems, PLATINUM PAC UL additive tends to work significantly better than regular-viscosity PAC materials. For difficult filtration-control fluids, a combination of the UL product and regular-viscosity PAC products is generally most effective.

Advantages

- Readily dispersible
- Effective in low concentrations for controlling fluid loss and building viscosity
- Produces minimal viscosity increase
- 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
- Effective over a wide range of pH levels
- Has application in all water-base muds, ranging from low-solids, non-dispersed systems; compatible with all common mud-treating additives
- Excellent environmental acceptability

Limitations

- Circulating temperature stability to approximately 300°F (149°C)
- 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

Toxicity and Handling

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the Material Safety Data Sheets (MSDS).

Packaging and Storage

PLATINUM PAC UL anionic polymer is packaged with 25-lb (11.3-kg) net product in 5-gal (19-L) buckets and 50-lb (22.7-kg) bags.

Store in a cool, dry place.

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