PLATINUM PAC UL
Low-viscosity cellulosic filtration control polymer

ADVANTAGES
- Is readily dispersible
- Controls fluid loss at low concentrations
- Displays a minimal viscosity increase
- Inhibits swelling and dispersion
- Resists bacterial attack, requiring no biocides or preservatives
- Functions over a wide range of salinity, hardness, and pH levels
- Has application in all water-based muds, ranging from low-solids, nondispersed systems; compatible with all common mud-treating additives
- Excellent environmental acceptability

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

Because it is an ultralow (UL) additive, it causes a minimal increase in viscosity in water-based muds. PLATINUM-PAC UL* low-viscosity cellulosic filtration control polymer is readily dispersible in a wide range of water-based mud systems.

This polymer controls fluid loss in freshwater, seawater, KCl, and salt muds. It 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 polymer 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/m³]. 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/m³].

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

The 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, the polymer 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.

Toxicity and handling
Bioassay information is available on request. Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the material safety data sheet (MSDS).

Packaging and storage

Typical Physical Properties

<table>
<thead>
<tr>
<th>Physical property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical appearance</td>
<td>Free flowing white powder</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.5–1.6</td>
</tr>
<tr>
<td>pH (1% solubility)</td>
<td>6.5–8.0</td>
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</tbody>
</table>

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