**HERCUL-EZ™**

**EXTREME SOLIDS SUSPENSION FLUID**

**DESCRIPTION**
HERCUL-EZ is a proprietary additive that is used in conjunction with bentonite based drilling muds. With proper formulation, the system will produce a unique drilling fluid with excellent shear thinning characteristics. At low shear or at rest, the fluid will gel and allow for suspension of large cuttings, yet thins immediately under pumping conditions. At rest, HERCUL-EZ fluid looks and behaves like a semi-solid, but when sheared, even slightly, will revert back to a thin, almost water-like consistency. HERCUL-EZ is designed to be compatible with CETCO bentonite-based drilling fluids. HERCUL-EZ is NSF/ANSI Standard 60, Drinking Water Treatment Chemicals - Health Effects.

**RECOMMENDED USE**
Ideal for difficult-to-drill applications such as large river crossings or in gravel/cobble. The extreme shear-thinning nature is well suited for mud recycling systems and for situations where excessive flow rates and pump pressures are to be avoided. **DO NOT USE WITH ANIONIC ADDITIVES SUCH AS PAC’S, PHPA’S, AND THINNERS.**

**CHARACTERISTICS**
- Extreme solids suspension capable of supporting and moving sand, gravel, and cobbles
- Helps prevent formation bridging and blockage due to settling of drill-cuttings
- Lower pump pressures can reduce the likelihood of frac-outs
- Unique filter cake means that fluid is contained in borehole, even when drilling through gravel and cobbles
- Ideal for use with recycling systems as it will not blind screens
- Flow profile is plug-like for more complete borehole sweeping. Thinning only occurs at the borehole walls and drill-stem

**MIXING AND APPLICATION**

**DO NOT USE WITH ANIONIC ADDITIVES SUCH AS PAC’S, PHPA’S, AND THINNERS**

Pretreat freshwater to achieve a pH of 10 or higher. Add bentonite and allow to hydrate for at least 20 minutes before adding HERCUL-EZ. Add HERCUL-EZ and mix for 5 to 20 minutes before pumping. It is important to allow adequate pre-hydration of the bentonite in order to maximize performance of this system.

**HERCUL-EZ MIXING RATIOS**

<table>
<thead>
<tr>
<th>NUMBER OF BAGS (50 LB)</th>
<th>SODA ASH (LB)</th>
<th>HERCUL-EZ NUMBER OF BAGS (25 LB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUREGOLD GEL</td>
<td>3-4</td>
<td>12</td>
</tr>
<tr>
<td>PREMIUM GEL</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>SUPER GEL-X</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>HYDRAUL-EZ</td>
<td>5</td>
<td>12</td>
</tr>
</tbody>
</table>

**PACKAGING**
25 lb (11.4 kg) bags, 80 per pallet. All pallets are plastic-wrapped.