QUAD POWER™ POWER-SAND™
SAND AND GRAVEL BLEND

DESCRIPTION
POWER-SAND™ is a highly concentrated, liquid polymer that can either serve as a stand-alone fluid or can be added to other QUAD POWER™ polymer drilling products. Use it with POWER-BASE™ to increase solids suspension. POWER-SAND will produce a high viscosity solution designed to suspend sand, silt, and fine gravel. POWER-SAND contains a combination of proprietary lost circulation materials and can produce a thin filter-cake on the walls of a borehole which can prevent fluid from flowing out into porous formations.

RECOMMENDED USE
QUAD POWER polymer drilling products are designed for use in smaller diameter/short-length horizontal bores when use of bentonite is not desired. The POWER-SAND product can be used in conjunction with POWER-BASE or used as a stand-alone blend for many jobs with two to four bags being enough for the 500-gallon tanks commonly used. If there are adverse drilling conditions, single-dose bags of the other QUAD POWER polymer drilling products can be added as necessary. When added to POWER-BASE fluids, generally only one to two bags is required.

ADVISORY
QUAD POWER polymer drilling products or any polymer products alone should never replace bentonite based drilling fluids for larger diameter, longer bore shots, or exceptionally challenging and higher risk projects.

CHARACTERISTICS
► Bags are sized perfectly to match the dose needed for a 500-gallon mix tank – no half-emptied containers
► Blend of proprietary LCM additives will slow loss of material out into a porous formation
► Creates a tight, thin filter cake that will help support boreholes through coarse-sands
► Has considerable tolerance to saltwater intrusion and can be used to drill in areas where road-salt contaminates soil
► Highly concentrated polymer produces high viscosity with very low dosage
► Liquid viscosifier mixes into water more quickly and with less shear than powdered products
► Takes up a lot less space on a jobsite or on a shelf

QUAD POWER PRODUCT APPLICATION
NUMBER OF BAGS PER 500 GALLONS FRESHWATER

<table>
<thead>
<tr>
<th>SOIL CONDITIONS</th>
<th>POWER-BASE</th>
<th>POWER-TERGE</th>
<th>POWER-CLAY</th>
<th>POWER-SAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNKNOWN</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SAND</td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>SAND &amp; GRAVEL</td>
<td>1</td>
<td>1</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>SAND &amp; CLAY</td>
<td>1</td>
<td>1</td>
<td>0.5</td>
<td>2</td>
</tr>
<tr>
<td>CLAY</td>
<td>1</td>
<td>1-2</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>STICKY CLAY</td>
<td>1-2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

PACKAGING
~0.5 gallon (64 ounce) bag, 4 bags per case, 72 cases per pallet.