DCA™-14005 pH Control Agent

DCA™-14005 pH control agent is a liquid additive that is most often used as a pH control agent for some high pH fracturing fluids, such as DFS™-BCG fracturing fluid. DCA-14005 agent is also used in other applications where an adjustment of the fluid pH to a high level is required.

Applications

When used as pH control agent for high-pH fracturing fluids, the amount of DCA-14005 agent used will be dependent upon the quality of water being used and the other additives present in the fluid. The amount used can range from less than 1 gal/Mgal to over 10 gal/Mgal.

Raising the water or gelled fluid pH to a high level (above 11) with DCA-14005 agent can be used to destroy any bacteria present in the fluid. This can be used as a method to preserve gelled fluids from bacterial degradation.

DCA-14005 agent may also be used for other applications, such as when BE-7™ bactericide is used in relatively high concentrations to degrade polymeric damage in wells. In this case, the DCA-14005 agent is used to raise the fluid pH to a level where the BE-7 bactericide will not be overly corrosive to the tubing.

DCA-14005 agent may also be used to neutralize returned treatment fluid that is too acidic for disposal.

Features

DCA-14005 agent is not a buffering agent. While DCA-14005 agent can be used to raise the pH to a certain level, contamination with an acidic compound will result in a rapid drop in the fluid pH.

Compatibilities

DCA-14005 agent is not compatible with acidic chemicals and especially with strong acid. Contact of DCA-14005 agent with acid chemicals can result in the generation of dangerous amounts of heat and will result in a rapid drop in the fluid pH.

Some water samples may contain high levels of dissolved divalent ions such as magnesium or calcium. The addition of sufficient amounts of DCA-14005 agent to water containing these ions can result in the precipitation of the magnesium and calcium from solution. In some cases, DCA-14005 agent is added to water to intentionally precipitate these ions from solution as a method of water purification.

DCA™-14005 pH Control Agent - Product Specifications

<table>
<thead>
<tr>
<th>Part No. (55-gal drum)</th>
<th>864051</th>
<th>Density</th>
<th>10.62 lb/gal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part No. (330-gal tote)</td>
<td>864226</td>
<td>pH</td>
<td>14</td>
</tr>
<tr>
<td>Form</td>
<td>Clear, colorless liquid</td>
<td>Freezing Point</td>
<td>-7°F (-14°C)</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.27</td>
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