Injectrol® service is an internally catalyzed silicate system that achieves intermediate depth-of-matrix penetration. This action helps control water flow during drilling, completion, production, and injection operations.

**Features**

Injectrol IT sealant is a three-component system containing Injectrol A component, Activator™ IT, and water.

The gel strengths of Injectrol gels are inversely proportional to gel time. The less time required for gelation, the stronger the resultant gel. Often, a tail-in solution of Injectrol IT sealant is a more highly catalyzed Injectrol IT solution.

Often, the activator concentration is increased during the treatment to help increase the strength of the Injectrol gel nearest the wellbore.

**Applications**

Injectrol IT sealant provides field-suitable pump times within a bottomhole injection temperature (BHIT) range of 120° to 180°F (49° to 82°C).

Injectrol IT sealant uses Activator IT for its activator. This system provides widely variable set times and precipitates particles of hard solids when this time has elapsed. Laboratory testing shows that Activator IT is an effective plugging agent in rock matrices.

Injectrol IT sealant provides an effective seal at temperatures of 120°F or higher. Because of slight variations in the chemicals and mixing waters, laboratory-scale tests must be conducted before job recommendations can be made so that pump times are accurate.

### Injectrol® A Component—Product Specifications

<table>
<thead>
<tr>
<th>Part No.</th>
<th>100001623</th>
<th>Boiling Point</th>
<th>213°F (100°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Clear, colorless to hazy liquid</td>
<td>Pour Point</td>
<td>35°F (1°C)</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.400</td>
<td>Flash Point</td>
<td>30°F (-1°C)</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>11.66 lb/gal</td>
<td>Packaging</td>
<td>54-gal drum</td>
</tr>
<tr>
<td>pH</td>
<td>11.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Activator™ IT—Product Specifications

<table>
<thead>
<tr>
<th>Part No.</th>
<th>100003750</th>
<th>Specific Gravity</th>
<th>1.500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>White, solid powder</td>
<td>pH</td>
<td>5.5 to 7.5 (10% solution at 20°C)</td>
</tr>
<tr>
<td>Packaging</td>
<td>50-lb bag</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The mixing water for the Injectrol® solutions must be no cooler than 60°F (15°C). The expected gel times for Injectrol IT sealant at temperatures below 60°F (15°C) become shorter as the temperature decreases.

Shut-in times of approximately 48 hours should allow the near-wellbore temperature to build up and set the Injectrol IT sealant.

**Compatibilities**

Injectrol IT sealant is incompatible with strong acids. Additionally, if Injectrol IT sealant is injected into sandstone formations with low permeability, or wells that take fluid at a very low rate, Hyflo® Super-Cel (1/2 lb/ft of interval) should be added to the first 2,000 gal of Injectrol solution for improved injectivity.

Injectrol IT sealant can be mixed with fresh water or 2% KCl. Field brines should be avoided.

**Benefits**

Injectrol IT sealant provides the following benefits:

- It can be mixed as a single solution.
- Tests demonstrate that Injectrol IT sealant initiated with Activator™ IT is superior in gel quality to that of the INJECTROL G process at higher temperatures.

The following benefits are common to all Injectrol treatments:

- low injection rates
- injection pressures well below the fracturing pressure
- exact displacement or a small underdisplacement into the formation