Sodium Chloride (NaCl) Accelerator

Sodium chloride (NaCl), commonly known as salt, can be used in low concentrations to accelerate the setting of cement. In high concentrations, NaCl retards the setting of most cements, improves bonding of cement to shales, and minimizes damage in zones sensitive to fresh water. A defoamer should be added to dry blends or to mixing water to minimize foaming and air entrainment.

Features

Sodium chloride is a crystalline solid additive used in oilwell cementing applications. NaCl will not accelerate as effectively as calcium chloride (CaCl₂); however, NaCl may be more readily available. NaCl salt is applicable over a temperature range of 50° to 500°F (10° to 260°C). NaCl has the following effects on slurry properties:

- It decreases viscosity and thickening times at low concentrations and increases final strength.
- It increases density and water loss.

Benefits

When used for oilwell cementing, NaCl can provide the following benefits:

- Increased final strength
- Accelerated setting
- Better cement bonding to shales
- Reduced damage to water-sensitive reservoirs

### Sodium Chloride Accelerator (NaCl)—Product Specifications

<table>
<thead>
<tr>
<th>Part No.</th>
<th>516.00158</th>
<th>Bulk Density</th>
<th>71.00 lb/ft³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>White, solid, crystalline</td>
<td>pH</td>
<td>5.2</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.165</td>
<td>Packaging</td>
<td>80-lb bag</td>
</tr>
</tbody>
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