**ResinTech CG8-F** is a sodium form 8% crosslinked gel strong acid cation resin. CG8-F is a fine mesh resin with high surface area and a short diffusion path from the surface to the center of the bead. ResinTech CG8-F is intended for use in applications such as iron removal where extra surface area and a short diffusion path are needed for improved kinetics and/or when operating in high TDS solutions. CG8-F is available in the sodium form.

### FEATURES & BENEFITS

- **HIGHLY UNIFORM FINE PARTICLE SIZE**
  30 to 50 mesh size provides superior kinetics for high efficiency softeners; also effective for iron-bearing waters

- **LOW COLOR THROW**

- **SUPERIOR PHYSICAL STABILITY**
  93% plus sphericity and high crush strengths together with carefully controlled particle distribution provides long life and low pressure drop

- **COMPLIES WITH US FDA REGULATIONS**
  Conforms to paragraph 21CFR173.25 of the Food Additives Regulations of the US FDA

Prior to first use for potable water, resin should be backwashed for a minimum of 20 minutes, followed by 10 bed volumes of downflow rinse.

### HYDRAULIC PROPERTIES

#### PRESSURE LOSS
The graph above shows the expected pressure loss of ResinTech CG8-F per foot of bed depth as a function of flow rate at various temperatures.

#### BACKWASH
The graph above shows the expansion characteristics of ResinTech CG8-F as a function of flow rate at various temperatures.
**ResinTech® CG8-F**

**Physical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polymer Structure</td>
<td>Styrene/DVB</td>
</tr>
<tr>
<td>Polymer Type</td>
<td>Gel</td>
</tr>
<tr>
<td>Functional Group</td>
<td>Sulfonic Acid</td>
</tr>
<tr>
<td>Physical Form</td>
<td>Spherical beads</td>
</tr>
<tr>
<td>Ionic Form as shipped</td>
<td>Sodium</td>
</tr>
<tr>
<td>Total Capacity</td>
<td>&gt;2.0 meq/mL</td>
</tr>
<tr>
<td>Water Retention</td>
<td></td>
</tr>
<tr>
<td>Sodium form</td>
<td></td>
</tr>
<tr>
<td>Approximate Shipping Weight</td>
<td></td>
</tr>
<tr>
<td>Sodium form</td>
<td></td>
</tr>
<tr>
<td>Screen Size Distribution (U.S. mesh)</td>
<td>30 to 50</td>
</tr>
<tr>
<td>Maximum Fines Content (&lt;50 mesh)</td>
<td>30 percent</td>
</tr>
<tr>
<td>Minimum Sphericity</td>
<td>93 percent</td>
</tr>
<tr>
<td>Uniformity Coefficient</td>
<td>1.4 approx.</td>
</tr>
<tr>
<td>Resin Color</td>
<td>Amber</td>
</tr>
</tbody>
</table>

Note: Physical properties can be certified on a per lot basis, available upon request

**Suggested Operating Conditions**

- **Maximum continuous temperature**: 280°F
- **Minimum bed depth**: 24 inches
- **Backwash expansion**: 25 to 50 percent
- **Maximum pressure loss**: 25 psi
- **Operating pH range**: 0 to 14 SU
- **Regenerant Concentration**
  - **Salt cycle**: 10 to 15 percent NaCl
  - **Regenerant level**: 4 to 15 lbs./cu.ft.
  - **Regenerant flow rate**: 0.5 to 1.5 gpm/cu.ft.
  - **Regenerant contact time**: >20 minutes
- **Displacement flow rate**: Same as dilution water
- **Displacement volume**: 10 to 15 gallons/cu.ft.
- **Rinse flow rate**: Same as service flow
- **Rinse volume**: 35 to 60 gallons/cu.ft.
- **Service flow rate**: 1 to 10 gpm/cu.ft.

Note: These guidelines describe average low risk operating conditions. They are not intended to be absolute minimums or maximums.

For operation outside these guidelines, contact ResinTech Technical Support.

**Applications**

**Iron Removal**

*ResinTech* CG8-F has good capacity for iron removal. Soluble (ferrous) iron is removed by ion exchange, in much the same way as hardness ions are removed. Particulate (ferric) iron is removed by filtration. As a general rule of thumb, to protect against fouling, the iron content in the feedwater should not be more than 1 mg/L Fe per each 17 mg/L of hardness. This ensures an adequate salt dose and frequent regenerations which help prevent fouling.

**Softening**

*ResinTech* CG8-F is an 8% crosslinked cation resin optimized for industrial softening applications. CG8-F has higher total capacity than standard crosslinked resins such as CGS and has higher operating capacity when relatively large brine doses are used during regeneration. CG8-F is suitable for hot water applications and for waters that contain modest levels of chlorine.

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East Coast - West Berlin, NJ p:856.768.9600  •  Midwest - Chicago, IL p:708.777.1167  •  West Coast - Los Angeles, CA p:323.262.1600

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