DIAION™ WT01S is a small particle methacrylic-type weakly acidic cation exchange resin. It has carboxylic acid functionality, and has higher adsorption capacity and reaction rate. A wide range of applications, especially in a field of purification of pharmaceuticals, foods and organic chemicals, is recommended.

**Product**

<table>
<thead>
<tr>
<th>Grade Name</th>
<th>DIAION™ WT01S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Weak Acid Cation</td>
</tr>
<tr>
<td>Matrix</td>
<td>Methacrylic, Porous</td>
</tr>
<tr>
<td>Functional Group</td>
<td>Carboxylic Acid</td>
</tr>
<tr>
<td>Ionic Form</td>
<td>H⁺</td>
</tr>
</tbody>
</table>

**Specification**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Bead Count</td>
<td>- 95 min.</td>
</tr>
<tr>
<td>Total Capacity</td>
<td>meq/mL 3.0 min.</td>
</tr>
<tr>
<td>Water Content</td>
<td>% 45 - 55</td>
</tr>
<tr>
<td>Effective Size</td>
<td>mm 0.10 - 0.14</td>
</tr>
<tr>
<td>Uniformity Coefficient</td>
<td>- 1.6 max.</td>
</tr>
</tbody>
</table>

**Typical Properties**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping Density</td>
<td>g/L 720</td>
</tr>
<tr>
<td>Mean Particle Size</td>
<td>μm 230</td>
</tr>
<tr>
<td>Particle Density</td>
<td>g/mL 1.14</td>
</tr>
<tr>
<td>Total Swelling (H⁺ to Na⁺) %</td>
<td>42</td>
</tr>
</tbody>
</table>

**Recommended Operating Conditions**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Operating Temperature</td>
<td>℃ 150</td>
</tr>
<tr>
<td>Operating pH Range</td>
<td>5 - 14</td>
</tr>
<tr>
<td>Minimum Bed Depth</td>
<td>mm 800</td>
</tr>
<tr>
<td>Service Flow Rate</td>
<td>m/h 5 - 40</td>
</tr>
<tr>
<td>Regenerant</td>
<td>HCl</td>
</tr>
<tr>
<td>Regenerant Concentration %</td>
<td>HCl 1 - 5</td>
</tr>
<tr>
<td>Regenerant Level % of ionic load</td>
<td>110</td>
</tr>
<tr>
<td>Regenerant Flow Rate m/h</td>
<td>2 - 6</td>
</tr>
<tr>
<td>Total Rince Requirement BV</td>
<td>10 - 20</td>
</tr>
</tbody>
</table>

**Notice**

This information are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. The application, use and processing of our products are beyond our control and therefore your own responsibility.
Hydraulic Characteristics

The approximate pressure drop at various temperatures and flow rates for each meter of bed depth of DIAION™ WT01S resin in normal down flow operation is shown in the graphs below.

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