AMBERLITE™ PWA7 Resin
Drinking Water Grade
Chromate Selective

AMBERLITE PWA7 resin is an anion exchange resin designed for the removal of chromate from drinking water. Its high capacity makes AMBERLITE PWA7 resin the perfect choice for a simple, once through chromate removal process for municipal water treatment systems.

PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matrix</td>
<td>Cross linked polycondensate</td>
</tr>
<tr>
<td>Physical form</td>
<td>Cream coloured granules</td>
</tr>
<tr>
<td>Total exchange capacity</td>
<td>≥ 1.9 eq/L</td>
</tr>
<tr>
<td>Moisture holding capacity</td>
<td>58 – 68%</td>
</tr>
<tr>
<td>Shipping weight</td>
<td>610 kg/m³</td>
</tr>
<tr>
<td>(38 lb/ft³)</td>
<td></td>
</tr>
<tr>
<td>Particle Size</td>
<td></td>
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<tr>
<td>Screen grading</td>
<td>0.3 – 1.2 mm</td>
</tr>
<tr>
<td>(16 – 50 mesh US Std Screens)</td>
<td></td>
</tr>
<tr>
<td>Fines content</td>
<td>&lt;0.300 mm: 3% max</td>
</tr>
</tbody>
</table>

SUGGESTED OPERATING CONDITIONS

Please contact your Rohm and Haas representative for system design and application testing details.

- pH range: < 6.5
- Maximum operating temperature: 40 °C (105 °F)
- Minimum bed depth: 610 mm (24 inches)
- Typical service flow rate: 8 – 40 BV/hr* (1 – 5 gpm/ft³)

* 1 BV (Bed Volume) = 1 m³ solution per m³ resin

COMMISSIONING AND LIMITS OF USE

AMBERLITE PWA7 resin is suitable for use in potable water applications after an initial commissioning upflow rinse of 20 bed volumes of water at ambient temperature at service flow rate.

The operating capacity of AMBERLITE PWA7 resin depends on the operating conditions and the feed water conditions.

REGULATORY

AMBERLITE PWA7 resin is certified to ANSI / NSF Standard 61 for drinking water components drinking water components for applications with minimum flow rates greater than or equal to 1.1 gpm/ft³. Please contact your Rohm and Haas representative for additional certification information.

Resin products are manufactured in ISO 9001 certified facilities.
HYDRAULIC CHARACTERISTICS

Figure 1 and Figure 2 show the pressure drop data for AMBERLITE PWA7 resin as a function of flow rate and water temperature. Pressure drop data are valid at the start of the service run with clean water and a correctly classified bed. Figure 3 and Figure 4 show the bed expansion of AMBERLITE PWA7 resin as a function of backwash flow rate and water temperature.

**Figure 1 Pressure Drop (metric)**

- Pressure Drop, kPa per meter of bed depth
- Linear Flow Rate, m/h
- Temperature: 10 °C, 20 °C, 30 °C, 40 °C

**Figure 2 Pressure Drop (US units)**

- Pressure Drop, psi per foot of bed depth
- Linear Flow Rate, gpm/ft
- Temperature: 50 °F, 70 °F, 85 °F, 105 °F

**Figure 3 Bed Expansion (metric)**

- Bed Expansion, %
- Linear Velocity, m/h
- Temperature: 10 °C, 20 °C, 30 °C

**Figure 4 Bed Expansion (US units)**

- Bed Expansion, %
- Linear Velocity, gpm/ft
- Temperature: 50 °F, 70 °F, 85 °F, 105 °F

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Ion exchange resins and polymeric adsorbents, as produced, contain by-products resulting from the manufacturing process. The user must determine the extent to which organic by-products must be removed for any particular use and establish techniques to assure that the appropriate level of purity is achieved for that use. The user must ensure compliance with all prudent safety standards and regulatory requirements governing the application. Except where specifically otherwise stated, Rohm and Haas Company does not recommend its ion exchange resins or polymeric adsorbents, as supplied, as being suitable or appropriately pure for any particular use. Consult your Rohm and Haas technical representative for further information. Acidic and basic regenerant solutions are corrosive and should be handled in a manner that will prevent eye and skin contact. Nitric acid and other strong oxidizing agents can cause explosive type reactions when mixed with ion exchange resins. Proper design of process equipment to prevent rapid buildup of pressure is necessary if use of an oxidizing agent such as nitric acid is contemplated. Before using strong oxidizing agents in contact with Ion Exchange Resins, consult sources knowledgeable in the handling of these materials.

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