



Product Data Sheet

DuPont™ AmberLite™ PWA7 Ion Exchange Resin

Drinking Water-grade Resin for Selective Chromate Removal

Description

DuPont™ AmberLite™ PWA7 Ion Exchange Resin is a weak base anion designed for the removal of chromate from drinking water. Its high capacity makes AmberLite™ PWA7 the perfect choice for a simple, once-through, chromate removal process for municipal water treatment systems.

Applications

- Selective chromate removal in a non-regenerable system

Typical Properties

Physical Properties

| | |
|------------------|--|
| Copolymer | Crosslinked phenol-formaldehyde polycondensate |
| Matrix | Porous |
| Type | Weak base anion |
| Functional Group | Tertiary amine |
| Physical Form | Cream colored granules |

Chemical Properties

| | |
|--------------------------|------------|
| Ionic Form as Shipped | Free base |
| Total Exchange Capacity | ≥ 1.9 eq/L |
| Water Retention Capacity | 58 – 68% |

Particle Size §

| | |
|-------------------|--------------|
| Particle Diameter | 0.3 – 1.2 mm |
| < 300 µm | 3% max |
| > 1180 µm | 5% max |

Density

| | |
|-----------------|---------|
| Shipping Weight | 610 g/L |
|-----------------|---------|

§ For additional particle size information, please refer to the [Particle Size Distribution Cross Reference Chart](#) (Form No. 45-D00954-en).

Suggested Operating Conditions

| | |
|-------------------------------|--------------|
| Maximum Operating Temperature | 40°C (104°F) |
| pH Range | |
| Service Cycle | < 6.5 |
| Stable | 0 – 14 |

Hydraulic Characteristics

Estimated bed expansion of DuPont™ AmberLite™ PWA7 Ion Exchange Resin as a function of backwash flowrate and temperature is shown in Figure 1a and Figure 1b.

Estimated pressure drop for AmberLite™ PWA7 as a function of service flowrate and temperature is shown in Figure 2a and Figure 2b. These pressure drop expectations are valid at the start of the service run with clean water and a well-classified bed.

Figure 1a: Backwash Expansion
Temperature = 10 – 40°C

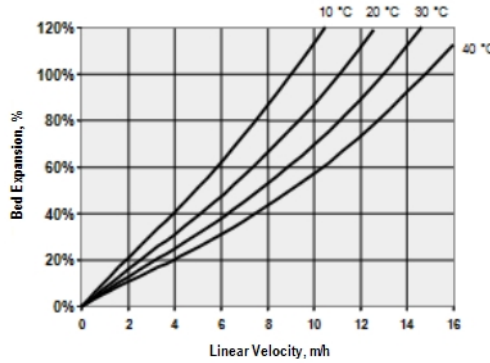


Figure 1b: Backwash Expansion
Temperature = 50 – 105°F

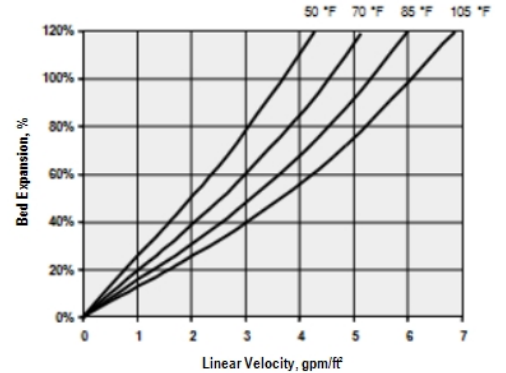


Figure 2a: Pressure Drop
Temperature = 10 – 40°C

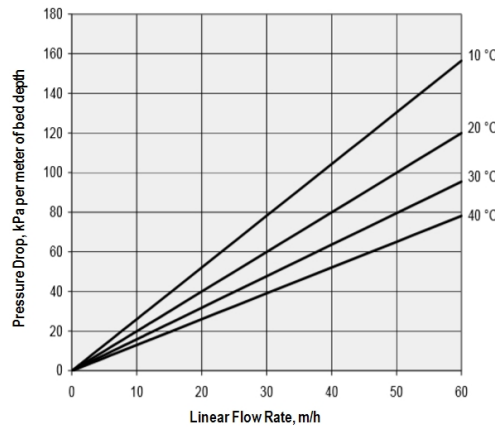
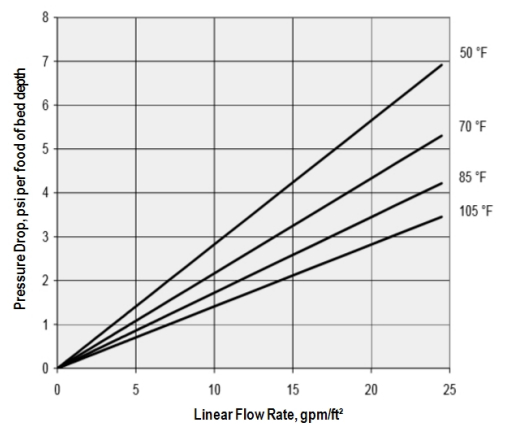


Figure 2b: Pressure Drop
Temperature = 50 – 105°F



Conditioning and Limits of Use

AmberLite™ PWA7 Ion Exchange Resin is suitable for use in potable water applications ¹ after an initial commissioning up-flow rinse of 20 bed volumes of water at ambient temperature at the service flowrate.

The operating capacity of AmberLite™ PWA7 resin depends on the operating conditions and the feedwater conditions.

¹ Please confirm the regulatory approval in your specific country of use.

Product Stewardship

DuPont has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with DuPont products—from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

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DuPont strongly encourages its customers to review both their manufacturing processes and their applications of DuPont products from the standpoint of human health and environmental quality to ensure that DuPont products are not used in ways for which they are not intended or tested. DuPont personnel are available to answer your questions and to provide reasonable technical support. DuPont product literature, including safety data sheets, should be consulted prior to use of DuPont products. Current safety data sheets are available from DuPont.

Please be aware of the following:

- **WARNING:** Oxidizing agents such as nitric acid attack organic ion exchange resins under certain conditions. This could lead to anything from slight resin degradation to a violent exothermic reaction (explosion). Before using strong oxidizing agents, consult sources knowledgeable in handling such materials.

Regulatory Note

This product may be subject to drinking water application restrictions in some countries; please check the application status before use and sale.

Have a question? Contact us at:

www.dupont.com/water/contact-us

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