

ION EXCHANGE RESIN

PersaLite™ UPS4500 Cl

Uniform Particle Size Strong Base Anion – Type I

DESCRIPTION AND APPLICATIONS

PersaLite[™] UPS4500 Cl is a uniform particle size, gel, strong base anion exchange resin for demineralization applications in co-flow, counterflow, packed beds, layered beds and mixed beds.

SPECIFICATIONS

Copolymer: Styrene-divinylbenzene

Matrix: Gel

Functional Group: Quaternary Ammonium – Type I

Physical Form: Light yellow beads

Ionic Form: Cl

Total Capacity: $\geq 1.35 \text{ eq/L (Cl}^- \text{ form)}$

Moisture Content: 49-55 %Particle Size: $550 \pm 50 \ \mu m$

 $\begin{array}{ll} \mbox{Uniformity Coefficient:} & \leq 1.1 \\ < 300 \ \mu m & \leq 0.30 \ \% \\ \geq 850 \ \mu m & \leq 5.00 \ \% \\ \mbox{Whole Beads Count:} & \geq 95 \ \% \end{array}$

Swelling: $Cl^- \rightarrow OH^-: \le 20\%$ Particle Density: 1.120 g/mL

Bulk Density: 700 g/L (43.7 lb/ft³)

SUGGESTED OPERATING CONDITIONS

Temperature Range: $100^{\circ}\text{C (212°F) (Cl}^{-}\text{ form)}$ $60^{\circ}\text{C (140°F) (OH}^{-}\text{ form)}$

pH Range: 0 – 14

Service Flow Rate: 8 – 40 BV/h

HYDRAULIC CHARACTERISTICS

Figure 1 shows the estimated bed expansion as a function of backwash flow rate and temperature. Estimated values of pressure drop across the bed resin as a function of flow rate and temperature are in Figure 2.

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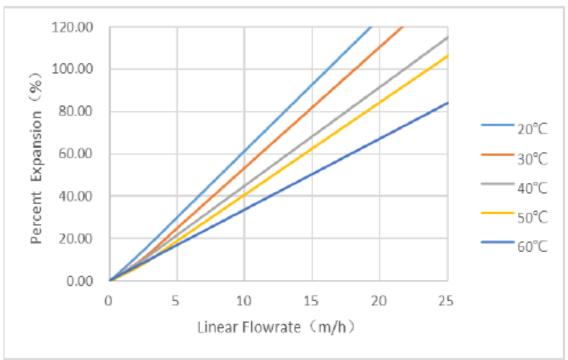


Figure 1: Backwash expansion

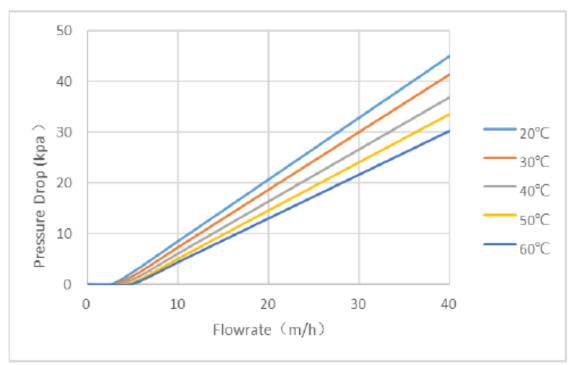


Figure 2: Pressure drop

Notes: The information and data are in good faith but without guarantee. Please consult our engineering team for more information before installing and operating the resin. Modifications of the specifications can occur without prior notice. IX resins should be stored in sealed bags in areas with a temperature above 0°C. See MSDS for safety issues.