

Canature Resin

001×8FG Styrene Series Gel Strong Acid Cation Exchange Resin

1. Description

Canature Resin is a high purity premium grade ,high capacity, gelular, sulfonated, polystyrene cation resin supplied in the sodium or hydrogen form as moist, tough, uniform, spherical beads. Canature Resin is intended for use in all water softening, dealkalization, deionization and chemical processing applications.

2. Typical Physical and Chemical Properties:

Items		Specification
Polymer Matrix Structure		Crosslinked Polystyrene Divinylbenzene
Physical Form and Appearance		Brown yellow to brown color beads
Functional Groups		R-SO ₃ ⁻
Ionic Form ,as shipped		Na ⁺
Total Capacity, Na ⁺ form, dry,quality		≥4.5mmol/g
Total Capacity, Na ⁺ form, wet, volumetric		≥2.0 mmol/ml
Moisture Retention, Na ⁺ form		≥45-50%
Particle Size Range 0.315-1.25mm		≥95%
Fine mesh 0.315-0.60mm		≥95%
Uniformity coefficient		≤1.6
Specific Gravity, moist Na ⁺ Form		1.25-1.29
Shipping Weight (approx.)		0.82-0.86
Strength (sphericity after attrition)		≥95%
Whole beads		≥95%
Effective size		0.4-0.8mm
Free water %		0-2.0
Reversible Swelling	Na ⁺ → H ⁺ (max.)	7-9%

3. Suggested Operating Condition

Item		Reference value	
pH Range, Stability		0 - 14	
Maximum Temperature	Na ⁺ Form	120°C (248°F) max.	
Minimum bed depth		700 mm	
Service flow rate		5 to 40 BV*/h	
Regenerant	HCl	H2SO4	NaCl

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Level (g/L)	50 to 150	60 to 240	80 to 250
Concentration (%)	5 to 8	0.7 to 6	10
Minimum contact time	30 minutes		
Slow rinse	2 BV at regeneration flow rate		
Fast rinse	2 to 4 BV at service flow rate		

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

4.LIMITS OF USE

Canature Resin is suitable for industrial uses. For other specific applications such as pharmaceutical, food processing or potable water applications, it is recommended that all potential users seek advice from Rohm and Haas in order to determine the best resin choice and optimum operating conditions.

5.HYDRAULIC CHARACTERISTICS

Figure 1 shows the bed expansion of Canature Resin, as a function of backwash flow rate and water temperature. Figure 2 shows the pressure drop data for Canature Resin, as a function of service flow rate and water temperature. Pressure drop data are valid at the start of the service run with clear water and a correctly classified bed.

Figure 1: Bed Expansion

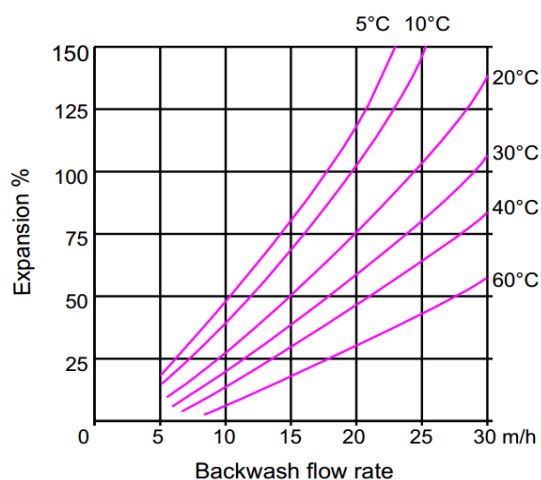


Figure 2: Pressure Drop

