

RESINSURE

HETERO RESIN

Resinsure grade, Gel strong acid cation exchange resin

PRODUCT DESCRIPTION

RESINSURE - Hetero resin is a gel type polystyrene sulfonate cation resin. It is mainly used for residential and industrial softening applications due to its high capacity and good physical stability.

APPLICATIONS - SOFTENING

RESINSURE - hetero is well suited to the treatment of food, beverages, drinking water and water used in food processing. RESINSURE - Hetero is certified by the WQA to NSF/ANSI Standards 44 and 61, as well as the French ACS certification, ensuring it is safe for contact with drinking water. Its spherical shape, excellent chemical and physical stability and very low extractable content play an important role in its successful use in these areas. It is well suited for industrial and drinking water softening applications due to its high capacity and good physical stability.

Typical Physical & Chemical Characteristics

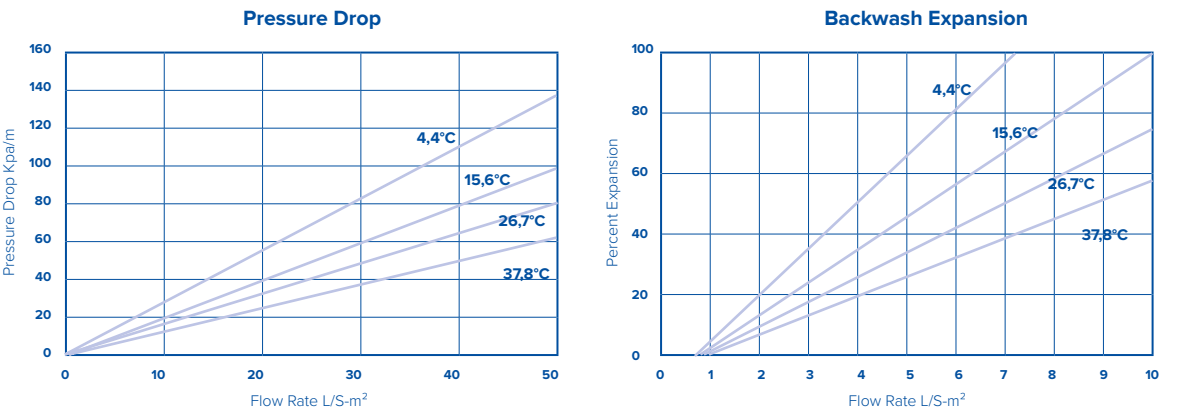
Matrix structure		Polystyrene crosslinked with DVB
Functional Group		R-(SO ₃)-M ⁺
Ionic Form, as shipped		Na ⁺
Physical Form And Appearance		Clear spherical beads
Sphericity		90% min.
Standard screen size range		0.3 – 1.25 mm
Particle Size Range		+ 1.25mm < 5%, -0.3 mm <1%
Uniformity Coefficient		1.6 max.
Water Retention	Na ⁺	45-51%
Swelling	Ca ²⁺ → Na ⁺	8% max.
Shipping Weight	Na ⁺	770-880 g/l
Total Exchange Capacity	Na ⁺	1.9 eq/l min.
pH Range		0-14



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Suggested Operating Conditions		
Maximum Temperature	Na+	120°C (248°F) max.
Minimum Bed Depth		0.6 m (24 inches)
Backwash Rate		25-50% bed expansion
Regeneration		
Regenerant Concentration		8-20% NaCl or saturated salt water
Flow Rate		2 to 4 BV/h
Contact Time		At least 30 Minutes
Displacement Rinse Rate		Same as Regenerant Flow Rate
Displacement Rinse Volume		1-2 BV
Fast Rinse Rate		8-40 BV/h
Fast Rinse Volume		3-6 BV
Service Flow Rate		8-40 BV/h

Hydraulic Properties



Pressure Drop
The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.

Backwash
After each cycle the resin bed should be backwashed at a rate that expands the bed 50 to 75 percent. This will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of RESINSURE Hetero in the sodium form.

