

UNIFORM PARTICLE SIZE POLYSTYRENIC MACROPOROUS HYDROGEN FORM

ResinTech SACMP-H-UPS is a uniform particle size macroporous strong acid cation resin in the hydrogen form. It is tan in color and highly cross-linked. The uniform beads and somewhat smaller harmonic mean size yield minimal pressure loss and better regeneration efficiency compared to resins with Gaussian size distribution. It is intended for high flow rate and high-temperature polishing where a hydrogen form cation resin is required.

APPLICATIONS

- Softening Industrial
- Demineralization
- Packed Beds

TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS	
Polymer Matrix	Styrenic Macroporous
Ionic Form	Hydrogen
Fuctional Group	Sulfonie Acid
Physical Form	TESOHerical Beads 'CON
Ionic Form Fuctional Group Physical Form Particle Size % < 50 mesh (300µm) Minimum Sphericity Uniformity Coefficient Reversible Swelling Temp Limit	20 to, 40 US Mash (400 - 841 µm)
% < 50 mesh (300μm)	< 0.3% minus 50
Minimum Sphericity	C 98%
Uniformity Coefficient	1.25
Reversible Swelling	Na to H 4% to 6%
Temp Limit N	300°F (149°C)
Capacity (meq/mL)	1.8
Moisture Retention	45% to 55%
Shipping Weight	49 - 51 lbs/ft³ (785 - 817 g/L)
Color	Tan
Regenerability	Yes
Uniform Particle Size	Yes

PACKAGING OPTIONS

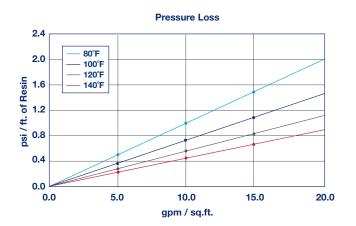
- 1 ft³ bags
- 1 ft³ boxes
- 1 ft³ drums
- 7 ft³ drums
- 42 ft³ supersacks

RESINTECHINC.

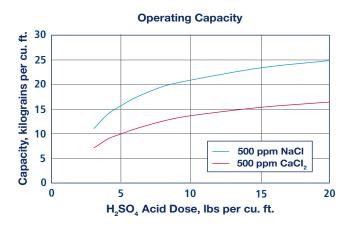
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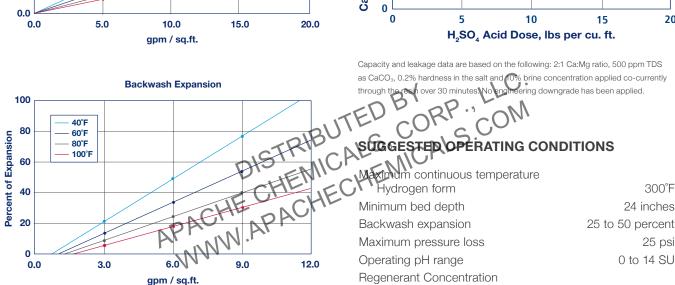
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Backwash Expansion



Capacity and leakage data are based on the following: 2:1 Ca:Mg ratio, 500 ppm TDS as CaCO₃, 0.2% hardness in the salt and 70% brine concentration applied co-currently



Hydrogen cycle

Hydrogen cycle

Salt cycle

Regenerant level

PACKED BEDS

ResinTech SACMP-H-UPS has a very narrow particle size range. This allows a slightly smaller bead size to be used which results in faster exchange of ions, more efficient regeneration and lower leakage. SACMP-H-UPS is ideal for packed beds and other types of countercurrent ion exchangers where consistent operation is important cycle after cycle.

Regenerant flow rate. Regenerant contact time Displacement flow rate **Displacement volume** Rinse flow rate Rinse volume Service flow rate

>20 minutes Same as dilution water 10 to 15 gallons/cu.ft. Same as service flow 35 to 60 gallons/cu.ft. 1 to 15 gpm/cu.ft.

300°F

25 psi

5 to 10 percent HCI

1 to 8 percent H₂SO₄

10 to 15 percent NaCl 4 to 15 lbs./cu.ft.

0.5 to 1.5 gpm/cu.ft.

Note: These guidelines describe average low risk operating conditions. They are not intended to be absolute minimums or maximums. For operation outside these guidelines, contact ResinTech Technical Support



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