### **PRODUCT SPECIFICATION SHEET**

### **SACMP-UPS**

STRONG ACID CATION

# UNIFORM PARTICLE SIZE POLYSTYRENIC MACROPOROUS SODIUM FORM

ResinTech SACMP-UPS is a tan-colored highly cross-linked macroporous strong acid cation resin of uniform particle size in sodium form. 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 use in high flow rate and high-temperature polishing.

#### **APPLICATIONS**

- Softening Industrial
- Demineralization
- Packed Beds

TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS	
Polymer Matrix	Styrenic Macroporous
Ionic Form	Sodium
Functional Group	Sulfonic Acid
Physical Form	Sphelical Beads
Physical Form  Particle Size  % < 50 mesh (300µm)  Minimum Sphericity  Uniformity Coefficient  Reversible Swelling  Temp Limit  Capacity (meq/mL)	20 to 40 (S) Mesh (400 - 841 μm)
% < 50 mesh (300μm)	<0.5% minu≥60
Minimum Sphericity	
Uniformity Coefficient	1.25
Reversible Swelling	Na to H 4% to 6%
Temp Limit	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 ft<sup>3</sup> drums
- 7 ft<sup>3</sup> drums
- 42 ft<sup>3</sup> supersacks

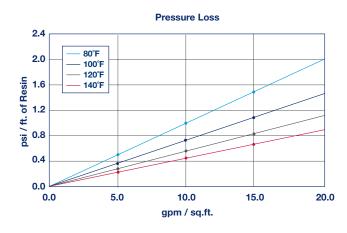
Revision 1.1 ResinTech, Inc.®

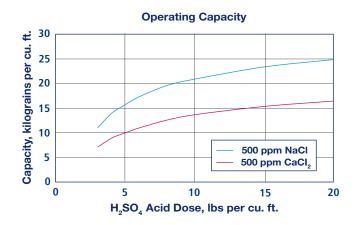


## **SACMP-UPS**

### STRONG ACID CATION

### **UNIFORM PARTICLE SIZE POLYSTYRENIC MACROPOROUS SODIUM FORM**





succession over 30 minutes No engineering downgrade has been applied.

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Maximum continuous temperature Sodium form

Minimum bed denth

Backwar. **Backwash Expansion** 100 40°F 60°F Percent of Expansion 80°F 100°F 60 40 20 0 0.0 3.0 gpm / sq.ft.

Capacity and leakage data are based on the following: 2:1 Ca:Mg ratio, 500 ppm TDS as CaCO<sub>3</sub>, 0.2% hardness in the salt and 10% brine concentration applied co-currently

300°F 24 inches 25 to 50 percent 25 psi 0 to 14 SU

Regenerant Concentration

Hydrogen cycle 5 to 10 percent HCI Hydrogen cycle 1 to 8 percent H<sub>2</sub>SO<sub>4</sub> Salt cycle 10 to 15 percent NaCl 4 to 15 lbs./cu.ft. Regenerant level Regenerant flow rate. 0.5 to 1.5 gpm/cu.ft. Regenerant contact time >20 minutes Displacement flow rate Same as dilution water Displacement volume 10 to 15 gallons/cu.ft. Rinse flow rate Same as service flow Rinse volume 35 to 60 gallons/cu.ft. Service flow rate 1 to 15 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

### **PACKED BEDS**

ResinTech SACMP-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-UPS is ideal for packed beds and other types of countercurrent ion exchangers where consistent operation is important cycle after cycle.

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