

## MAGNA SACMP-H

STRONG ACID CATION

POLYSTYRENIC MACROPOROUS  
HYDROGEN FORM

ResinTech SACMP-H is a tan-colored highly cross-linked macroporous strong acid cation resin in hydrogen form. SACMP-H is optimized for waters that punish other cation resins. ResinTech SACMP is intended for high flow rate and high-temperature polishing applications, and for other applications that require a hydrogen form cation resin and the highest possible physical strength and chemical durability.

### APPLICATIONS

- Demineralization
- High Temperature Applications
- Chemical Processing

| TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS |   |
|---|---|
| <b>Polymer Matrix</b>                         | Styrenic Macroporous                        |
| <b>Ionic Form</b>                             | Hydrogen                                    |
| <b>Functional Group</b>                       | Sulfonic Acid                               |
| <b>Physical Form</b>                          | Spherical Beads                             |
| <b>Particle Size</b>                          | 16 to 50 US Mesh (297 - 1190 µm)            |
| <b>% &lt; 50 mesh (300µm)</b>                 | < 1%  |
| <b>Minimum Sphericity</b>                     | 95%   |
| <b>Uniformity Coefficient</b>                 | 1.6   |
| <b>Reversible Swelling</b>                    | H to Na -4% to -6%                          |
| <b>Temp Limit</b>                             | 285°F (141°C)                               |
| <b>Capacity (meq/mL)</b>                      | 1.7   |
| <b>Moisture Retention</b>                     | 45% to 55%                                  |
| <b>Shipping Weight</b>                        | 46 - 48 lbs/ft <sup>3</sup> (737 - 769 g/L) |
| <b>Color</b>                                  | Tan   |
| <b>Regenerability</b>                         | Yes   |

### PACKAGING OPTIONS

- 1 ft<sup>3</sup> bags
- 1 ft<sup>3</sup> boxes
- 1 ft<sup>3</sup> drums
- 7 ft<sup>3</sup> drums
- 42 ft<sup>3</sup> supersacks

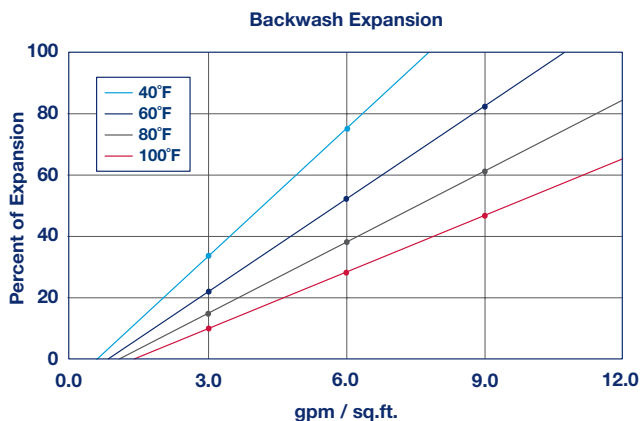
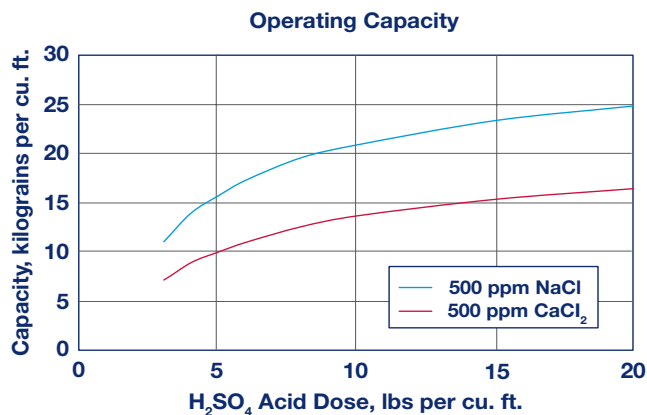
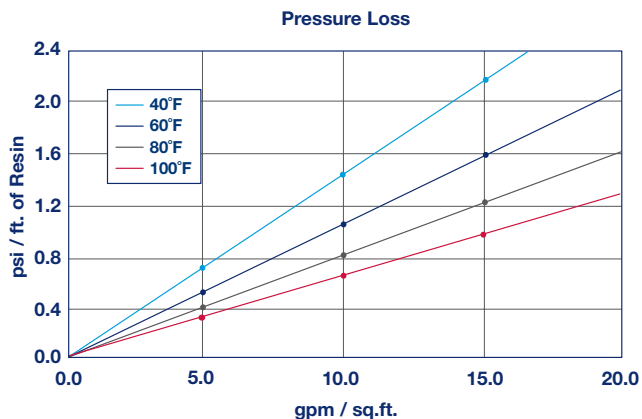
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Capacity and leakage data are based on the following: 2:1 Ca:Mg ratio, 500 ppm TDS as CaCO<sub>3</sub>, 0.2% hardness in the salt and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been applied.

### SUGGESTED OPERATING CONDITIONS

|                                |   |
|--------------------------------|---|
| Maximum continuous temperature | 280°F   |
| Hydrogen form                  | 24 inches                                     |
| Minimum bed depth              | 25 to 50 percent                              |
| Backwash expansion             | 25 psi  |
| Maximum pressure loss          | 0 to 14 SU                                    |
| Operating pH range             |   |
| Regenerant Concentration       |   |
| Hydrogen cycle                 | 5 to 10 percent HCl                           |
| Hydrogen cycle                 | 1 to 8 percent H <sub>2</sub> SO <sub>4</sub> |
| Salt cycle                     | 10 to 15 percent NaCl                         |
| Regenerant level               | 4 to 15 lbs./cu.ft.                           |
| 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 10 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

### DEMINERALIZATION

ResinTech SACMP-H can be used as the cation component in demineralization configurations where a hydrogen form cation resin is coupled with a hydroxide form anion resin. SACMP-H is ideal for high flow rate polishers and where high resistance to mechanical, thermal, and oxidative stresses is required.

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