

# MAGNA

## WACMP

WEAK ACID CATION

ACRYLIC MACROPOROUS  
HYDROGEN FORM

ResinTech WACMP is a hydrogen form macroporous weak acid cation resin. It has exceptionally high capacity and can be regenerated at close to 100% acid efficiency but is limited to use in alkaline waters with pH greater than 7. WACMP is intended for hardness removal from waters that contain significant alkalinity and for demineralization where the use of a weak acid cation resin is required.

### APPLICATIONS

- Partial Hardness Removal
- Metal Removal

### TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS

|                               |                                  |
|-------------------------------|----------------------------------|
| <b>Polymer Matrix</b>         | Acrylic Macroporous              |
| <b>Ionic Form</b>             | Hydrogen                         |
| <b>Functional Group</b>       | Carboxylic 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>     | 93%                              |
| <b>Uniformity Coefficient</b> | 1.7                              |
| <b>Reversible Swelling</b>    | H to Na 50% to 60%               |
| <b>Temp Limit</b>             | 212°F (100°C)                    |
| <b>Capacity (meq/mL)</b>      | 4.0                              |
| <b>Moisture Retention</b>     | 43% to 60%                       |
| <b>Shipping Weight</b>        | 47 - 49 lbs/ft³ (753 - 785 g/L)  |
| <b>Color</b>                  | White to Cream                   |
| <b>Regenerability</b>         | Yes                              |

### CERTIFICATIONS

- Halal Certified
- Kosher Certified
- FDA Compliance\*

### PACKAGING OPTIONS

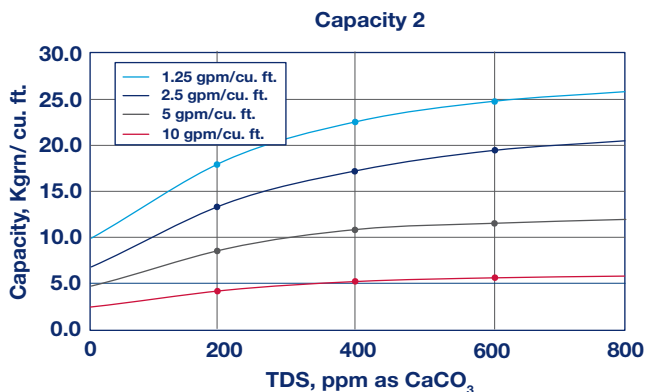
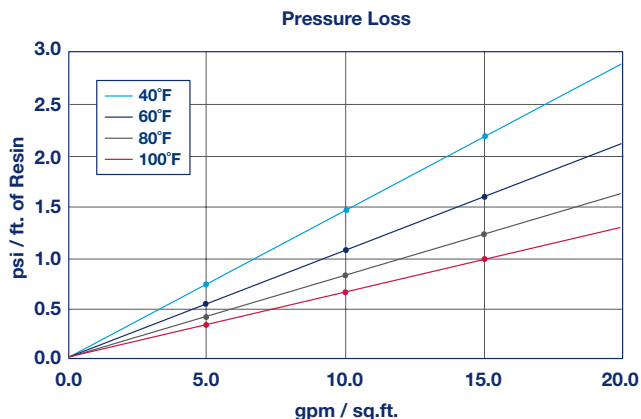
- 500 ml samples
- 1 ft³ bags
- 1 ft³ boxes
- 1 ft³ drums
- 7 ft³ drums
- 42 ft³ supersacks

\* Paragraph 21CFR173.25 of the Food Additives Regulations of the US FDA

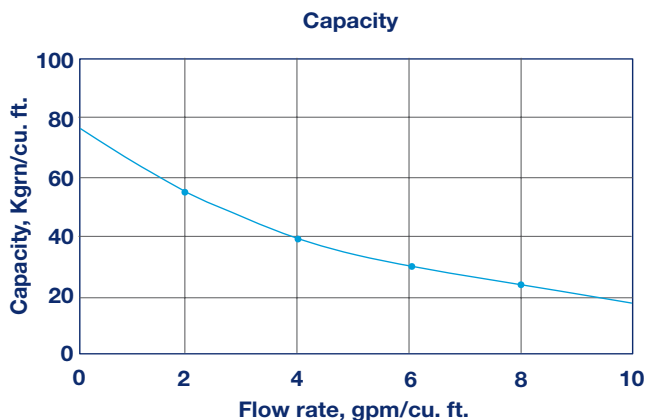
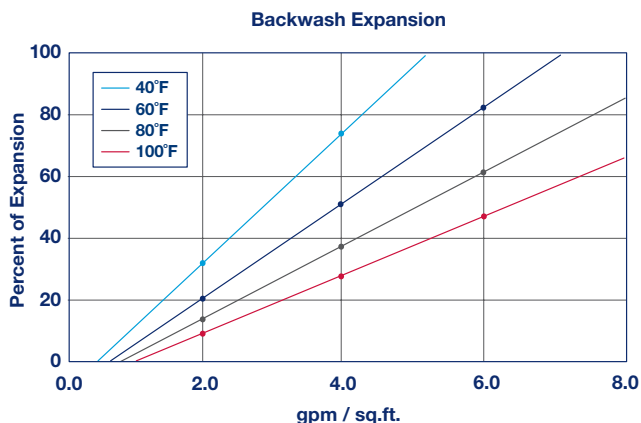
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## ACRYLIC MACROPOROUS HYDROGEN FORM



Caes 2: For alkalinity when alkalinity exceeds hardness; for hardness when hardness exceeds alkalinity.



Caes 1: For Hardness when alkalinity exceeds hardness; for alkalinity when hardness exceeds alkalinity.

### SUGGESTED OPERATING CONDITIONS

|                                |                                                   |
|--------------------------------|---------------------------------------------------|
| Maximum continuous temperature | 212°F                                             |
| Hydrogen form                  |                                                   |
| Minimum bed depth              | 30 inches                                         |
| Backwash expansion             | 25 to 50 percent expansion                        |
| Minimum operating pH           | >5 SU                                             |
| Regenerant Concentration       |                                                   |
| Hydrogen cycle                 | 1 to 5 percent HCl                                |
| Hydrogen cycle                 | 0.7 to 8 percent H <sub>2</sub> SO <sub>4</sub> * |
| Regenerant level               | Approx 120% of theoretical                        |
| Regenerant flow rate           | 0.3 to 1.5 gpm/cu.ft.                             |
| Regenerant contact time        | >30 minutes                                       |
| Displacement flow rate         | Same as dilution water                            |
| Displacement volume            | 10 to 15 gallons/cu.ft.                           |
| Rinse flow rate                | Same as service flow                              |
| Rinse volumet                  | 35 to 60 gallons/cu.ft.                           |
| Service flow rate              | 1 to 5 gpm/cu.ft.                                 |

\* Precipitation of calcium sulfate can occur at sulfuric acid concentrations above 1% when the resin is exhausted on hard water.

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