

WACMP-HP

Weak acid cation resin, acrylic/DVB macroporous, high-purity, hydrogen form

ResinTech WACMP-HP is a high-purity buffered form macroporous weak acid cation resin. The HP (high purity) designation means it is Gold Seal Certified by the WQA for use in potable water applications. It is pH buffered with sodium ions to avoid producing a low pH when first placed in use. WACMP-HP is intended for all weak acid cation applications and is recommended for cartridge use where potable water certification is required.



FEATURES & BENEFITS

- Macroporous structure
- High regeneration efficiency
- Superior physical stability
- Controlled particle size
- Complies with US FDA regulations

APPLICATIONS

- pH Correction of Acidic Waters
- Drinking Water Purification
- Acid Adsorption
- Lead Removal
- Temporary Hardness Removal



Meets NSF/ANSI/CAN 61
REACH Registered

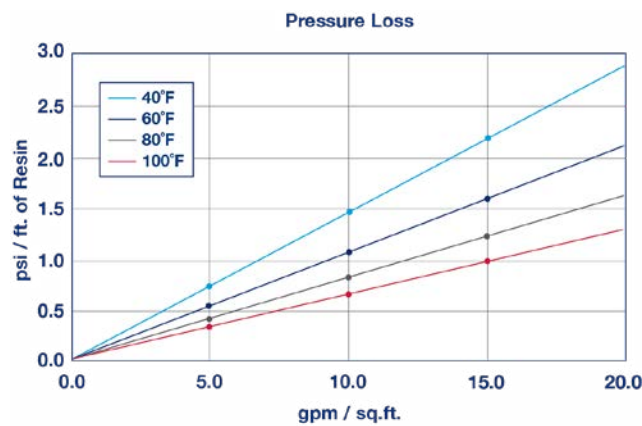
Kosher Certified
Halal Certified

Conforms to §21CFR173.25 of the USFDA Food Additives Regulations

WACMP-HP

Polymer Matrix	Acrylic/DVB	Reversible Swelling	30 to 60% (H → Na)
Polymer Type	Macroporous	Uniformity	Gaussian
Ionic Form (as shipped)	Hydrogen (H ⁺)	Uniformity Coefficient	1.70
Functional Group	Carboxylic Acid	Capacity (meq/mL)	4.00
Physical Form	Spherical Beads	Moisture Retention (%)	43 to 60
Particle Size US Mesh (μm)	16 (1190) to 50 (297)	Shipping Weight	45 - 47 lbs/cu.ft. (721 - 753 g/L)
< 50 mesh (300 μm) %	< 1%	Color	White to Cream
Minimum Sphericity (%)	93	Regenerable	Regenerable

PRESSURE LOSS



The graph above shows the expected pressure loss of ResinTech WACMP-HP per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH EXPANSION



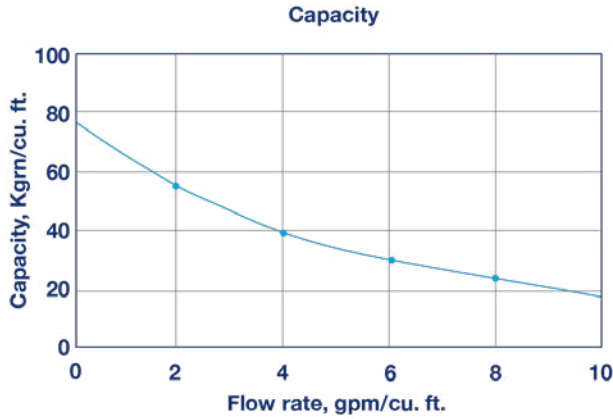
The graph above shows the expansion characteristics of ResinTech WACMP-HP as a function of flow rate at various temperatures.

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	212°F (100°C)	Flow Rate	
Minimum Bed Depth	24 in. (61.0 cm)	Working Service	1-5 gpm/cu.ft. (8-40 BV/h)
Operating pH Range	5.8 to 7.5		

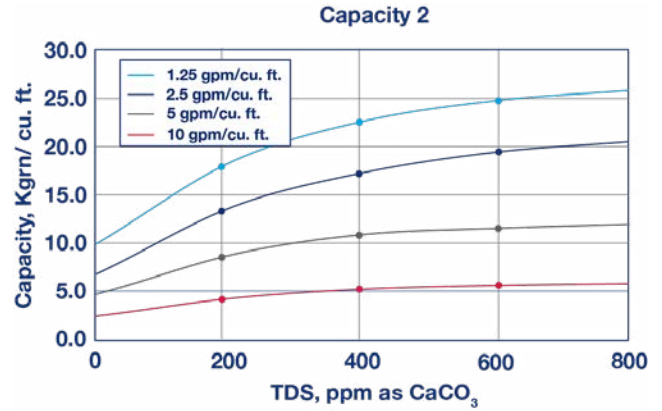


CAPACITY GRAPH 1



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 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been applied.

CAPACITY GRAPH 2

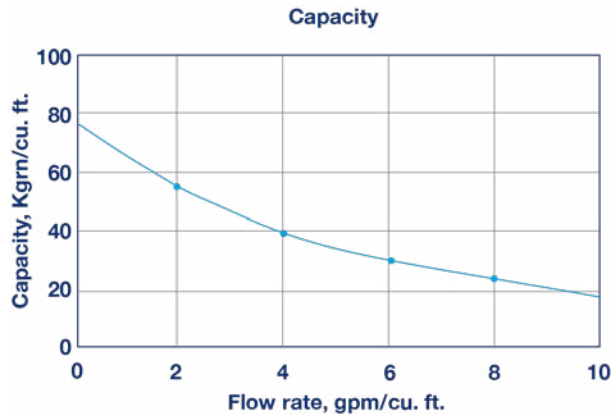


Capacity and leakage data are based on the following: 2:1 Ca:Mg ratio, 500 ppm TDS as CaCO₃, 0.2% hardness in the salt and 10% brine concentration applied co-currently through the resin over 30 minutes. No engineering downgrade has been applied.

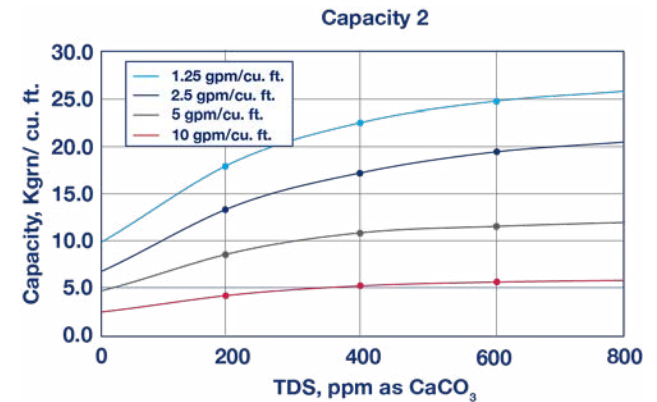
SOFTENER AND DEALKALIZER

ResinTech **WACMP-HP** removes hardness from water by neutralizing alkalinity from HCO₃ to CO₂. The carbon dioxide can then be removed in a degassifier. For complete removal of hardness, a strong acid cation type softener is needed. For complete conversion of HCO₃ alkalinity to CO₂, a hydrogen form cation may be needed.

CASE 1: For hardness when alkalinity exceeds hardness. Or, for alkalinity when hardness exceeds alkalinity:



CASE 2: For alkalinity when alkalinity exceeds hardness. Or, for hardness when hardness exceeds alkalinity:



Resin capacity is affected by flow rate and temperature. No engineering downgrade has been applied.

HIGH TDS SOFTENING

ResinTech **WACMP-HP** can be operated as a softener in the sodium cycle. Selectivity for hardness compared to sodium is between 5 and 10 times higher than conventional softening resins. Regeneration requires acid followed by caustic, salt can not be used. Sodium form weak acid resins can be used to soften high TDS waters up to approximately 50,000 ppm.

METALS REMOVAL

ResinTech **WACMP-HP** has higher selectivity for divalent transition metals as compared to hardness ions.

REGENERATION DETAILS

Hydrogen Cycle (HCl)	1 to 5%	Displacement Volume	10-15 gals/cu.ft. (1-2 BV)
Regenerant Flow Rate	0.3-1.5 gpm/cu.ft. (2-12 BV/h)	Rinse Flow Rate	Same as service flow
Regenerant Contact Time	> 30 minutes	Rinse Volume	35-60 gals/cu.ft. (5-8 BV)
Displacement Flow Rate	Same as dilution water		

PACKAGING

Standard

1 cu.ft. Bag | 42 cu.ft. Supersack
 5 cu.ft. Drum | 7 cu.ft. Drum

Metric

140L Drum | 200L Drum

SAFETY DATA SHEETS (SDS)

Safety Data Sheets (SDS) are available for all products on the ResinTech website. They contain important health and safety information that may be needed to protect your employees and customers from any known health and safety hazards associated with our products. We recommend that you secure and study the pertinent MSDS for our products and any other products being used.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith. However we do not make any guarantee or warranty. We caution against using these products in an unsafe manner or in violation of any patents; further we assume no liability for the consequences of any such actions.

Safety Data Sheets (SDS) are available at resintech.com

