

PRODUCT SPECIFICATION SHEET

MAGNA WBMP-UPS

WEAK BASE ANION

**POLYSTYRENIC MACROPOROUS
UNIFORM PARTICAL SIZE
FREE BASE FORM**

ResinTech WBMP-UPS is a uniform particle size styrenic macroporous weak base anion resin in the free base form. It has good capacity, moderate strong base functionality, excellent stability, a very low rinse requirement, and can be efficiently regenerated with a variety of alkaline chemicals, or with waste caustic left over from regeneration of strong base anion resin. WBMP-UPS is intended for use in multibed demineralization and other acid absorption applications.

APPLICATIONS

- Demineralization
- Organics Removal
- Uniform Particle Size

TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS

Polymer Matrix	Styrenic Macroporous
Ionic Form	Free Base
Functional Group	Dimethylamine
Physical Form	Spherical Beads
Particle Size	20 to 40 US Mesh (420 - 840 µm)
% < 50 mesh (300µm)	70%
Minimum Sphericity	95%
Uniformity Coefficient	1.2
Reversible Swelling	Free Base to HCl 15% to 25%
Temp Limit	212°F (100°C)
Capacity (meq/mL)	1.45
Moisture Retention	50% to 60%
Shipping Weight	39 - 41 lbs/ft ³ (625 - 657 g/L)
Color	White to Tan
Regenerability	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 F

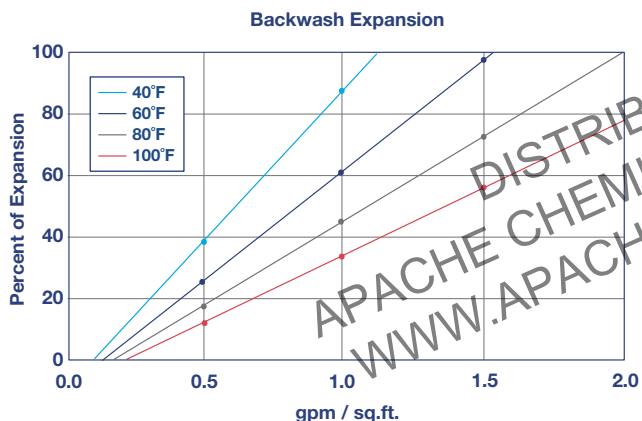
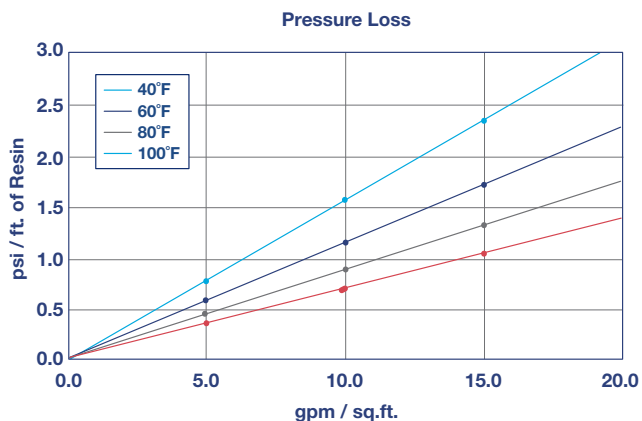
Revision 1.0
ResinTech, Inc.®



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DEMINERALIZER

ResinTech WBMP-UPS can be used in a two bed system following a strong acid cation unit (such as CG8-H) where weakly acidic anions such as silica and carbon dioxide do not have to be completely removed. Where complete removal of all anions is required, WBMP-UPS can be placed ahead of a strong base anion unit (such as SBG1P-OH). WBMP-UPS will efficiently remove strong acids such as chlorides, sulfates and nitrates, leaving silica and carbon dioxide to be removed by the strong base resin. WBMP-UPS is easily regenerated with modest caustic dosages or with waste caustic left over from the strong base anion unit.

ORGANIC REMOVAL

ResinTech WBMP-UPS is easily regenerated with sodium hydroxide, allowing the removal of organic acid anions as part of demineralization process utilizing an upstream hydrogen form strong acid cation exchanger. The use of WBMP-UPS in front of a hydroxide form strong base anion exchanger can help reduce organic fouling of the strong base anion resin, increasing run lengths between regenerations and reducing the rinse volume required before return to service. Because free base form weak base anion resins are only able to absorb acids, the feedwater must be significantly acidic or the resin must be preconverted into the acid sulfate or acid chloride form prior to use.

SUGGESTED OPERATING CONDITIONS

Maximum continuous temperature	212°F
Free Base form	
Minimum bed depth	24 inches
Backwash expansion	25 to 50 percent
Maximum pressure loss	20 psi
Operating pH range	<9 SU
Regenerant Concentration	
Hydroxide cycle	1 to 6 percent NaOH
Regenerant level	3 to 6 lbs./cu.ft.
Regenerant flow rate.	0.5 to 1.0 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 volume	35 to 60 gallons/cu.ft.
Service flow rate	1 to 4 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