

SIR-300 PH ADJ

Heavy metal selective, chelating resin, styrene/DVB macroporous, pH adjusted, sodium form

ResinTech SIR-300-pH-Adj is a sodium form macroporous chelating weak acid cation resin. Its unique chelating functionality removes divalent transition metals preferentially to alkaline earth metals such as calcium. SIR-300-pH-Adj is intended for the removal of low to moderate concentrations of heavy metals from waste streams. It is partially converted to the hydrogen form such that the initial effluent pH is slightly acidic rather than strongly alkaline.



FEATURES & BENEFITS

- Removes Heavy Metal Cations From Process Solutions
- Removes Heavy Metals From Rinse Waters
- Superior Physical Stability
- Controlled Particle Size

APPLICATIONS

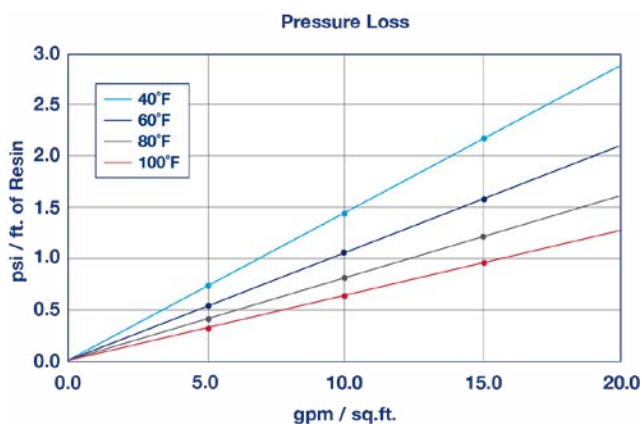
- Cartridge Applications
- Copper Removal
- Heavy Metal Removal
- Lead Removal
- pH Control

REACH Registered

SIR-300 PH ADJ

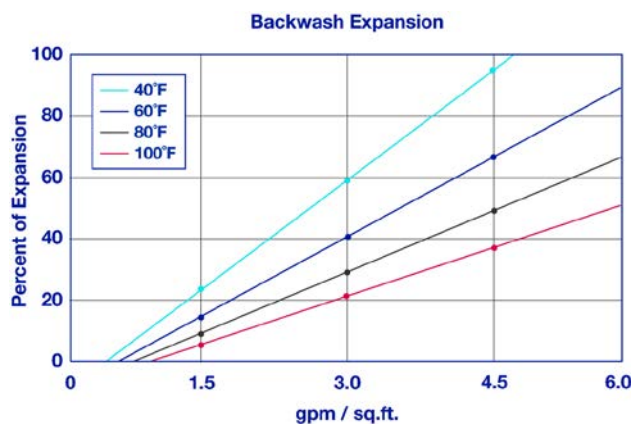
Polymer Matrix	Styrene/DVB	Minimum Sphericity (%)	95
Polymer Type	Macroporous	Reversible Swelling	30 to 40% (Na → H)
Ionic Form (as shipped)	Sodium (Na ⁺)	Uniformity	Gaussian
Functional Group	Iminodiacetic	Uniformity Coefficient	1.60
Physical Form	Spherical Beads	Capacity (meq/mL)	1.40
Particle Size US Mesh (µm)	16 (1190) to 50 (297)	Moisture Retention (%)	50 to 60
< 50 mesh (300 µm) %	< 1%	Shipping Weight	43 - 45 lbs/cu.ft. (689 - 721 g/L)
		Color	White to Tan

PRESSURE LOSS



The graph above shows the expected pressure loss of ResinTech SIR-300 PH ADJ 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 SIR-300 PH ADJ as a function of flow rate at various temperatures.

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	212°F (100°C)	Flow Rate	
Minimum Bed Depth	36 in. (91.4 cm)	Working Service	1-2 gpm/cu.ft. (8-16 BV/h)
Backwash Expansion (%)	25 to 50		

REGENERATION DETAILS

Acid Strip (HCl)	0.5 to 6%	Displacement Flow Rate	Same as dilution water
Caustic Neutralization (NaOH)	0.5 to 6%	Displacement Volume	10-20 gals/cu.ft. (1-3 BV)
Regenerant Level	2-10 lbs/cu.ft. (32.0-160.2 g/L)	Rinse Flow Rate	Same as service flow
Regenerant Flow Rate	0.25-1.0 gpm/cu.ft. (2-8 BV/h)	Rinse Volume	35-60 gals/cu.ft. (5-8 BV)
Regenerant Contact Time	> 30 minutes		



PACKAGING**Standard**

1 cu.ft. Bag | 7 cu.ft. Drum

42 cu.ft. Supersack | 5 cu.ft. Drum

Metric

1000L Supersack | 140L 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](https://www.resintech.com)

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