

SIR-300

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

ResinTech SIR-300 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. Since the sodium form is highly alkaline, pH adjustment is usually required before first use. SIR-300 is intended for the removal of low to moderate concentrations of heavy metals from waste streams.



FEATURES & BENEFITS

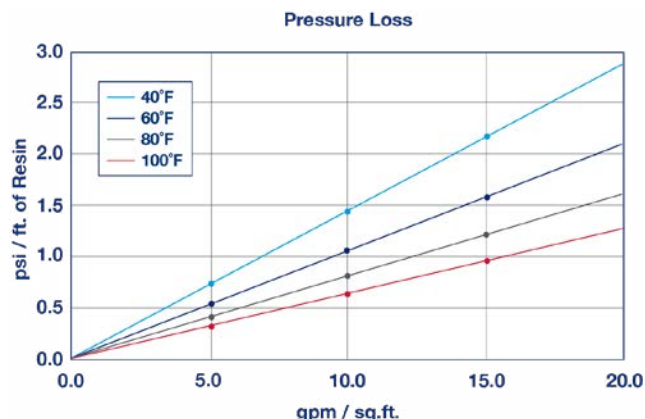
- Removes Heavy Metal Cations From Process Solutions
- Removes Heavy Metals From Rinse Waters
- Superior Physical Stability
- Controlled Particle Size

APPLICATIONS

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

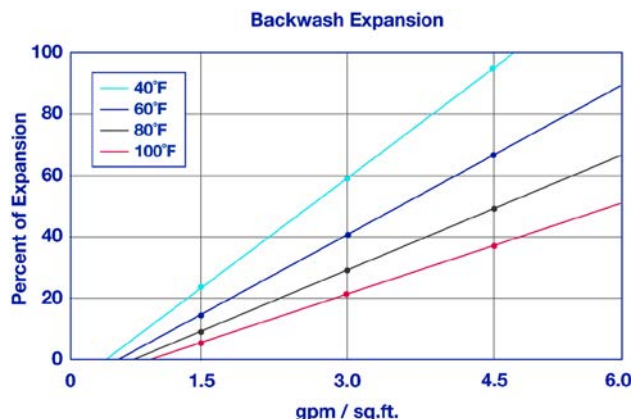
Polymer Matrix	Styrene/DVB	Minimum Sphericity (%)	95
Polymer Type	Macroporous	Reversible Swelling	30 to 40% (Na → H)
Ionic Form (as shipped)	Sodium (Na ⁺)	Uniformity	Gaussian
Functional Group	Iminodiacetic	Uniformity Coefficient	1.60
Physical Form	Spherical Beads	Capacity (meq/mL)	1.10
Particle Size 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 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 as a function of flow rate at various temperatures.

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	212°F (100°C)
Minimum Bed Depth	36 in. (91.4 cm)
Backwash Expansion (%)	25 to 50

Flow Rate	
Working Service	1-2 gpm/cu.ft. (8-16 BV/h)

REGENERATION DETAILS

Acid Strip (HCl)	0.5 to 6%
Caustic Neutralization (NaOH)	0.5 to 6%
Regenerant Level	2-10 lbs/cu.ft. (32.0-160.2 g/L)
Regenerant Flow Rate	0.25-1.0 gpm/cu.ft. (2-8 BV/h)
Regenerant Contact Time	> 30 minutes

Displacement Flow Rate	Same as dilution water
Displacement Volume	10-20 gals/cu.ft. (1-3 BV)
Rinse Flow Rate	Same as service flow
Rinse Volume	35-60 gals/cu.ft. (5-8 BV)

PACKAGING

Standard

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

Metric

140L Drum | 1000 L Supersack



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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