

SIR-110-MP-HP

PFAS & perchlorate selective, strong base anion resin, styrene/DVB macroporous, high purity, buffered chloride form

ResinTech SIR-110-MP-HP is a buffered chloride form PFAS, perchlorate, and nitrate selective macroporous strong base anion resin. Its unique functionality greatly increases the selectivity for nitrate while greatly decreasing the interference from sulfate ions. SIR-110-MP-HP is recommended for the removal of perchlorate, nitrate, and some perfluorinated (PFAS) compounds. Its 'HP' designation indicated it has been Gold Seal certified by the WQA for use with drinking water applications. The buffered chloride form mitigates the pH drop at startup.



FEATURES & BENEFITS

- Buffered Chloride form for pH Control
- Highest Operating Capacity
- Low Sulfate Selectivity
- Superior Physical Stability
- Controlled Particle Size

APPLICATIONS

- Drinking Water Purification
- Cartridge Applications
- Iodide Removal
- Nitrate Removal
- Perchlorate Removal
- PFAS Removal

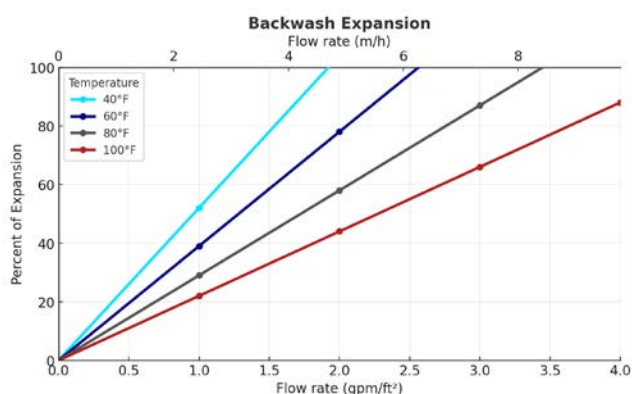


Meets NSF/ANSI/CAN 61

SIR-110-MP-HP

Polymer Matrix	Styrene/DVB	Reversible Swelling	Cl → No ₃ -5 to -10%
Polymer Type	Macroporous	Uniformity	Gaussian
Ionic Form (as shipped)	Buffered Chloride (Cl ⁻)	Uniformity Coefficient	1.60
Functional Group	Tributylamine	Capacity (meq/mL)	0.60
Physical Form	Spherical Beads	Moisture Retention (%)	38 to 50
Particle Size US Mesh (µm)	20 (841) to 50 (297)	Shipping Weight	40 - 42 lbs/cu.ft. (641 - 673 g/L)
< 50 mesh (300 µm) %	< 1%	Color	White to Tan
Minimum Sphericity (%)	95	Regenerable	Regenerable

BACKWASH EXPANSION



The graph above shows the expansion characteristics of ResinTech SIR-110-MP-HP as a function of flow rate at various temperatures.

SUGGESTED OPERATING CONDITIONS

Minimum Bed Depth	24 in. (61.0 cm)	Flow Rate	
Maximum Pressure Loss	20 psi (138 kPa)	Working Service	1-3 gpm/cu.ft. (8-24 BV/h)
Operating pH Range	4.0 to 10.0		

PERCHLORATE REMOVAL

ResinTech **SIR-110-MP-HP** is ideal for single use PFAS and/ or perchlorate removal applications and is a cost effective method to remove trace levels of these contaminants from water. These compounds are very strongly attracted to the ResinTech **SIR-110-MP-HP**, so much so that regeneration is impractical or impossible. However, in most cases the ions can load to almost the full capacity of the resin, resulting in very long life and eliminating the need to regenerate and re-use the spent resin.



NITRATE REMOVAL

ResinTech **SIR-110-MP-HP** can be used in the buffered chloride form to remove nitrates as well as perchlorate from potable water. **SIR-110-MP-HP** works exceptionally well in high TDS water. When treating waters with high hardness the brine dilution and displacement waters should be softened and a low hardness salt used to prevent scaling due to calcium sulfate formation during regeneration.

IODIDE REMOVAL

ResinTech **SIR-110-MP-HP** has much higher selectivity for iodide than other strong base anion resins (about 7 to 10 times higher). This high selectivity allows for single use removal of iodide against rather high concentrations of other ions with reasonable throughput capacity. Regeneration, although possible, is complicated, and cannot be accomplished with salt or other common regenerants.

REGENERATION DETAILS

Salt Cycle (NaCl)	10 to 15%	Displacement Flow Rate	Same as dilution water
Regenerant Level	3-10 lbs/cu.ft. (48.1-160.2 g/L)	Displacement Volume	10-15 gals/cu.ft. (1-2 BV)
Regenerant Flow Rate	0.25-1.0 gpm/cu.ft. (2-8 BV/h)	Rinse Flow Rate	Same as service flow
Regenerant Contact Time	> 30 minutes	Rinse Volume	35-60 gals/cu.ft. (5-8 BV)

NaCl Regeneration applicable for Nitrate Removal applications only

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

