

# SUPRA

## SIR-1300

CATALYST

**CATALYTIC REDOX MEDIA  
POLYSTYRENIC GEL  
CHLORIDE FORM**

ResinTech SIR-1300 is a chloride form hybrid gel strong base anion resin. It has manganese oxide mono atomically dispersed throughout the polymer. The oxygen atoms combine with ferrous iron to form an insoluble ferric oxide, which is trapped inside the resin bed. Oxygen is replenished by air scour in the cleaning cycle, then accumulated iron particles are removed by backwash. SIR-1300 is intended for the removal of ferrous iron from potable water.

### APPLICATIONS

- Ferrous Iron Removal

### TYPICAL PROPERTIES & PHYSICAL CHARACTERISTICS

<b>Polymer Matrix</b>	Styrenic Gel
<b>Ionic Form</b>	Chloride
<b>Functional Group</b>	Trimethylamine
<b>Physical Form</b>	Spherical Beads
<b>Particle Size</b>	16 to 50 US Mesh (297 - 1190µm)
<b>% &lt; 50 mesh (300µm)</b>	< 1%
<b>Minimum Sphericity</b>	93%
<b>Uniformity Coefficient</b>	1.6
<b>Temp Limit</b>	250°F (121°C)
<b>Moisture Retention</b>	48% to 58%
<b>Shipping Weight</b>	43 - 46 lbs/ft <sup>3</sup> (673 - 705 g/L)
<b>Color</b>	Black
<b>Regenerability</b>	Yes

### PACKAGING OPTIONS

- 500 ml samples
- 1 ft<sup>3</sup> bags
- 1 ft<sup>3</sup> boxes
- 1 ft<sup>3</sup> drums
- 7 ft<sup>3</sup> drums
- 42 ft<sup>3</sup> supersacks

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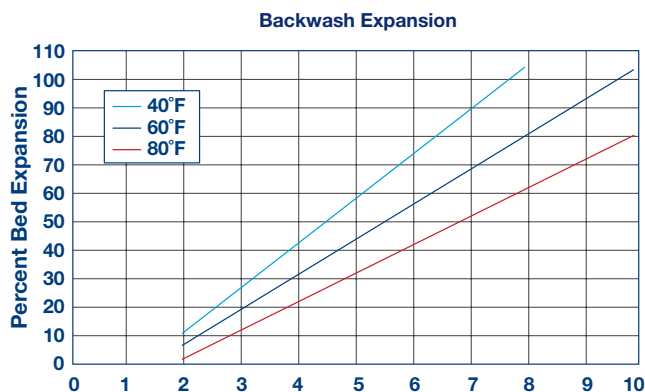


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**SUGGESTED OPERATING CONDITIONS**

pH Range	> 6.5
Alkalinity	100 ppm minimum
Dissolved Oxygen	> 15% of Iron Content
TOC	< 1ppm
Free Chlorine	0.5 ppm max.
Total Dissolved Solids	2500 ppm max.
Total Suspended Solids	10 ppm max.
Recommended Temperature Range	40 °F-100°F
<b>A. Up to 5 ppm Iron, Mn, H2S</b>	
Bed Depth	30" min.
Service Flow Rate	3.8-4 gpm/cu. ft.
Backwash Bed Expansion	40-50%
Backwash Frequency	Daily
Backwash Time	15-20 minutes
<b>B. Up to 10 ppm Iron, Mn, H2S</b>	
Bed Depth	30" min.
Service Flow Rate	2 gpm/cu. ft.
Backwash Bed Expansion	40-50%
Backwash Frequency	Daily
Backwash Time	15-20 minutes

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

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