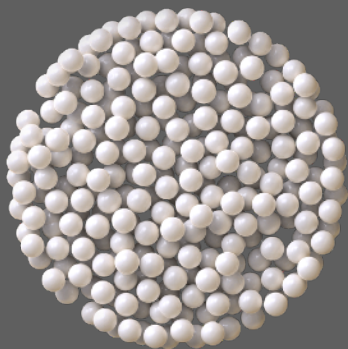


# Felite™ Resin

## FC100-HCP



Strong Acid Cation, Macroporous  
Uniform Mesh Size  
H<sup>+</sup> form

Condensate Polishing Grade

Felite™ FC100-HCP is a hydrogen form macroporous highly crosslinked strong acid cation resin, and is ideally suited for high pressure condensate polishing applications when paired with either Felite™ FA127-OHCP or Felite™ FA201-OHCP. High DVB crosslinking and good capacity help provide long service life when treating condensates that contain ammonia or other amines.

Felite™ FC100-HCP has narrowly graded particle size and slightly larger bead size to provide low pressure loss and help improve separation from CP grade anion resins.

### Principal Application:

- Condensate Polishing;
- Cation Component in Mixed Bed;

### TYPICAL PHYSICAL & CHEMICAL CHARACTERISTICS:

<b>Polymer Structure</b>	Styrene/DVB, Macroporous
<b>Appearance</b>	Spherical Beads
<b>Functional Group</b>	Sulfonic Acid
<b>Ionic form, as shipped</b>	H <sup>+</sup>
<b>Total Capacity (mmol/ml)</b>	1.8 min. (Na <sup>+</sup> )
<b>Moisture Retention</b>	54 - 59%
<b>Mean Size Range (mm)</b>	0.6 - 0.7 (≤0.4mm, 1% max.; >0.9mm, 5% max.)
<b>Uniformity Coefficient (max.)</b>	1.2
<b>Reversible Swelling, Na<sup>+</sup> → H<sup>+</sup> (max.)</b>	7%
<b>Shipping Weight (g/L, approx.)</b>	740 - 775 (48 lb/ft <sup>3</sup> )
<b>Specific Gravity</b>	1.18
<b>Temperature Limit</b>	150°C (300°F)
<b>Stability, pH Range</b>	0 - 14

### PACKAGING:



25 Litres / 1 cu.ft PE Bag;  
42 Bags Per Pallet;  
20 Pallets Per 20ft Container



1 m<sup>3</sup> Supersack Per Pallet;  
20 Pallets Per 20ft Container



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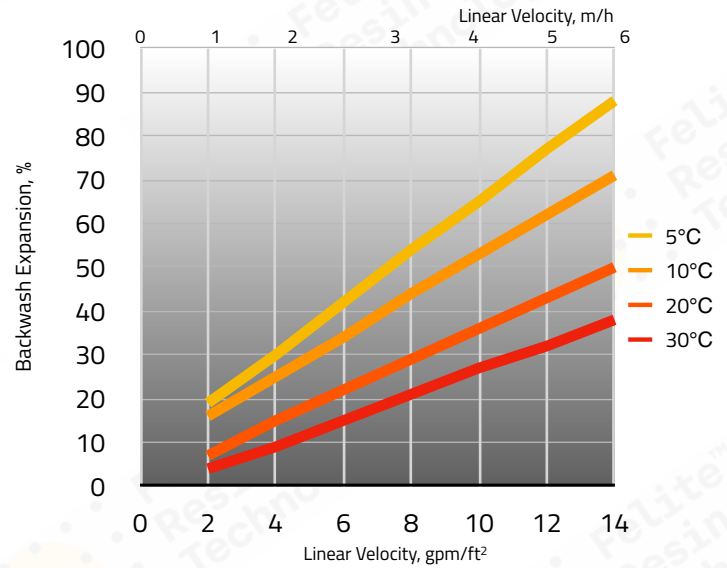
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## PRESSURE DROP



## BACKWASH EXPANSION



## PERFORMANCE

The operating capacity depends on several factors such as the water analysis and the level of regeneration. The data to calculate the operating capacity and the ionic leakage with co-flow regeneration are given in the Engineering Data Sheets.

## LIMITS OF USE

Felite™ FC100 resin is suitable for industrial uses. For other specific applications such as pharmaceutical, food processing or potable water applications, it is recommended that all potential users seek advice from Felite™ Resin Technology in order to determine the best resin choice and optimum operating conditions.

## HYDRAULIC CHARACTERISTICS

Figure 1 shows the pressure drop data for Felite™ FC100 resin, as a function of service flow rate and water temperature. Figure 2 shows the bed expansion of Felite™ FC100 resin, as a function of backwash flow rate and water temperature. Pressure drop data are valid at the start of the service run with clear water and a correctly classified bed.

## SUGGESTED OPERATING CONDITIONS:

<b>Minimum Bed Depth</b>	700mm		
<b>Service Flow Rate</b>	5 - 170 BV*/h   5 - 120 m/h		
<b>Regeneration</b>			
- Regenerant	HCl	H <sub>2</sub> SO <sub>4</sub>	NaCl
- Level (g/L)	50 - 150	50 - 200	80 - 400
- Concentration (%)	4 - 10	1 - 5	10
- Minimum Contact Time	30 minutes		
- Slow Rinse	2 BV* at regeneration flow rate		
- Fast Rinse	2 - 4 BV* at service flow rate		

\* 1 BV (Bed Volume) = 1 m<sup>3</sup> solution per m<sup>3</sup> resin

The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, Felite™ expressly disclaims any and all liability as to any results obtained or arising from any use of the product or such information.

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