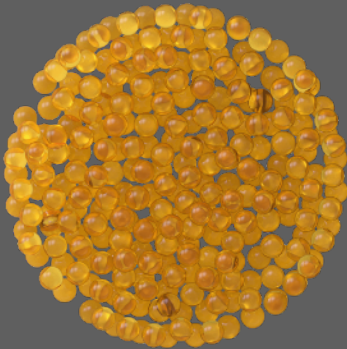


# Felite™ Resin

## FC110-U



Strong Acid Cation, Gel

Uniform Mesh Size

Na<sup>+</sup> form

Industrial Grade

Felite™ FC110-U is a 10% crosslinked gel strong acid cation resin with uniform mesh range, supplied in sodium form and it is primarily used in coflow regenerated industrial softening and demineralization applications that require good regeneration efficiency and oxidative stability. Its uniform beads size distribution gives optimum operating capacity with minimum leakages of ions and also minimum pressure drop across the resin bed.

### Principal Application:

- Softening - Industrial;
- Demineralization;
- Iron Removal;
- Packed Bed;

### TYPICAL PHYSICAL & CHEMICAL CHARACTERISTICS:

<b>Polymer Structure</b>	Styrene/DVB, Gel
<b>Appearance</b>	Spherical Beads
<b>Functional Group</b>	Sulfonic Acid
<b>Ionic form, as shipped</b>	Na <sup>+</sup>
<b>Total Capacity (mmol/ml)</b>	2.2 min. (Na <sup>+</sup> )
<b>Moisture Retention</b>	40 - 43%
<b>Mean Size Range (mm)</b>	0.6 - 0.7 (≤0.4mm, 1% max.; >0.9mm, 5% max.)
<b>Uniformity Coefficient (max.)</b>	1.25
<b>Reversible Swelling, Na<sup>+</sup> → H<sup>+</sup> (max.)</b>	8%
<b>Shipping Weight (g/L, approx.)</b>	820 - 860 (54 lb/ft <sup>3</sup> )
<b>Specific Gravity</b>	1.30
<b>Temperature Limit</b>	130°C (265°F)
<b>Stability, pH Range</b>	0 - 14

### PACKAGING:



25 Litres / 1 cu.ft PE Bag;  
48 / 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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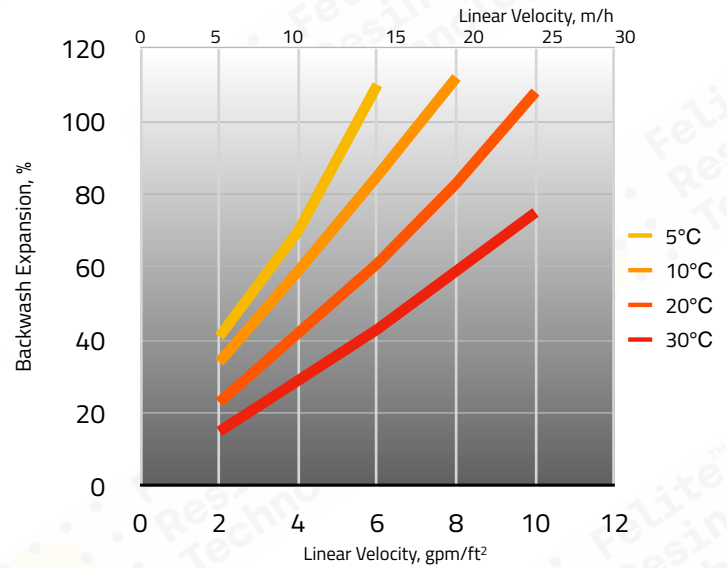
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## PRESSURE DROP



## 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™ FC110 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™ FC110 resin, as a function of service flow rate and water temperature. Figure 2 shows the bed expansion of Felite™ FC110 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 - 40 BV*/h		
<b>Regeneration</b>			
- Regenerant	HCl	H <sub>2</sub> SO <sub>4</sub>	NaCl
- Level (g/L)	50 - 150	60 - 240	80 - 250
- Concentration (%)	5 - 8	0.7 - 6	10
- Flow Rate (BV/h)	2 - 5	2 - 20	2 - 8
- 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 reliance on such information.

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