



## AMBERLITE™ FPC11 Na

Food Grade Strong Acid Cation Exchanger

### Introduction

AMBERLITE FPC11 Na is a unique gel type, strongly acidic, cation exchange resin. This gelular matrix also provides high exchange capacity and superior resistance to fouling from fermentation products.

AMBERLITE FPC11 Na has been designed specifically for the recovery of amino acids such as lysine.

It contains sulfonic acid exchange groups on a unique polystyrene matrix. Its principal characteristics are excellent physical, chemical and thermal stability.

AMBERLITE FPC11 Na has been widely used in fixed and moving bed systems for the recovery of lysine from various feed stocks.

### Properties

Matrix	Crosslinked polystyrene
Functional groups	Sulphonates
Physical form	Amber beads
Ionic form as shipped	Na <sup>+</sup>
Total exchange capacity	≥ 2.05 eq/L (Na <sup>+</sup> form)
Moisture holding capacity	43 - 47 % (Na <sup>+</sup> form)
Shipping weight	850 g/L
Harmonic mean size	0.600 - 0.800 mm
Fine content	< 0.300 mm : 1 % max
Maximum reversible swelling	Na <sup>+</sup> → H <sup>+</sup> : 10 %

### Hydraulic Characteristics

Figure 1 shows the bed expansion of AMBERLITE FPC11 Na, as a function of backwash flow rate and water temperature.

Figure 2 shows the pressure drop data for AMBERLITE™ FPC11 Na, as a function of service flow rate and the temperature of the solution to be treated.

#### Conversion Factors:

1 kPa/m equals 0.0442 psi/ft

1 m/h equals 0.41 USgpm/ft<sup>2</sup>

Fig. 1 : Bed Expansion

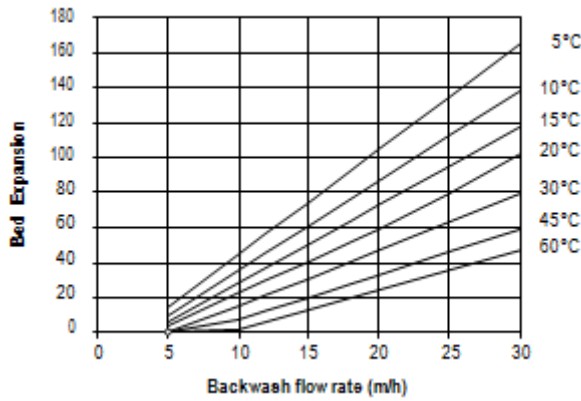
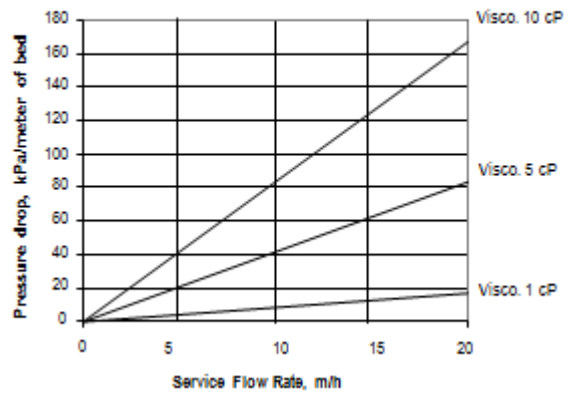


Fig. 2 : Pressure Drop



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