ROHM AND HAAS | Beverages and Nutrition

PRODUCT DATA SHEET

AMBERLITE™ FPC14 Na

Food Grade Strong Acid Cation Exchanger

For the Decalcification of Thin Sugar Juices

FOOD PROCESSING

AMBERLITE FPC14 Na has been specially developed for pharmaceutical and food applications (i.e. decalcification of saccharose thin juice) following a special manufacturing process which solvent free.
AMBERLITE FPC14 Na can also be used in the recovery of amino acids and is ideal as a general purpose gel type strong acid cation where a high capacity is required such as in amino acid recovery.

AMBERLITE FPC14 Na is a gel type, strong acid, cation exchange resin of the sulphonated polystyrene type. Its principal characteristics are excellent physical, chemical and thermal stability, good ion exchange kinetics and high exchange capacity.

PROPERTIES

Matrix	Crosslinked polystyrene
Functional groups	Sulfonates
Physical form	Amber beads
Ionic form as shipped	Na^+
Total exchange capacity [1]	≥ 2.05 eq/L (Na^+ form)
Moisture holding capacity [2]	41 to 49 % (Na^+ form)
Shipping weight	808 g/L
Harmonic mean size	0.600 - 0.800 mm
Fines content [2]	< 0.300 mm : 2.0 % max

[1] *Average value calculated from statistical quality control*

[2] *Contractual value*

Test methods are available on request.

SUGGESTED OPERATING CONDITIONS

Maximum operating temperature	120 °C
Service Flow rate	5 to 20 BV*/h
Regenerants	NaCl
Regenerant Level	60 to 250 g/L_R
Regenerant Concentration	10 %
Regenerant Flow rate	1 to 3 BV/h
Minimum contact time	30 minutes
Slow rinse	2 BV at regeneration flow rate
Fast rinse	2 to 4 BV at service flow rate

** 1 BV (Bed Volume) = 1 m^3 solution per m^3 resin*

FOOD PROCESSING

As governmental regulations vary by country, it is recommended that potential users seek advice from their Amberlite representative in order to determine the best resin choice, optimum operating and regeneration conditions.

HYDRAULIC CHARACTERISTICS

Figure 1 shows the bed expansion of AMBERLITE FPC14 Na, as a function of backwash flow rate and water temperature.
Figure 2 shows the pressure drop data for AMBERLITE FPC14 Na, as a function of service flow rate and viscosity of the solution to be treated.

Conversion Factors:

- 1 kPa/m equals 0.0442 psi/ft
- 1 m/h equals 0.41 USgpm/ft^2

Fig. 1 : Bed Expansion

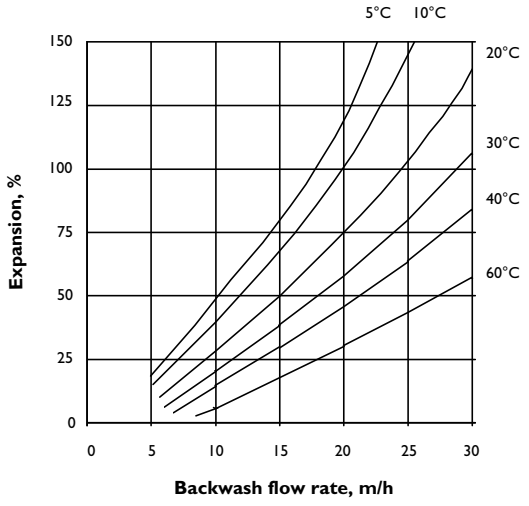
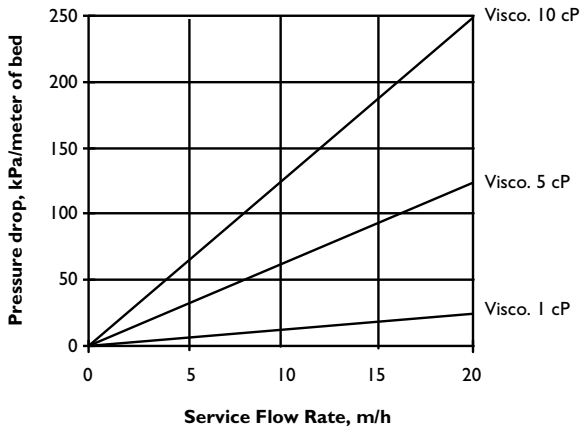


Fig. 2 : Pressure Drop



All our products are produced in ISO 9001 certified manufacturing facilities.

Rohm and Haas/Ion Exchange Resins - Philadelphia, PA - Tel. (800) RH AMBER - Fax: (215) 409-4534
Rohm and Haas/Ion Exchange Resins - 75579 Paris Cedex 12 - Tel. (33) 1 40 02 50 00 - Fax : 1 43 45 28 19

http://www.amberlitefp.com

ROHM AND HAAS