



Product Data Sheet

AMBERLITE™ FPA52RF

Food Grade Weak Base Anion Exchange

Features

AMBERLITE FPA52RF resin is a high capacity polystyrene, weak base anion exchanger. This makes it an excellent choice for the removal of strong anions from solutions with relatively high dissolved solids. The combined adsorption efficiency and physical stability of AMBERLITE FPA52RF resin also makes it an excellent choice for demineralization of food solutions such as gelatin, citrus juices, sugar juices, sucrose, glucose, lactose and others.

AMBERLITE FPA52RF is highly efficient for the uptake of strong acids (e.g. HCl, H2SO4) when following a strong acid cation exchanger in the H form. Its macroporous structure facilitates excellent adsorption and desorption of organic matter. It has an outstanding mechanical and osmotic stability, making it suitable for the treatment of solution with high ionic concentrations.

This is a reduced fines product which improves system pressure drop and lowers resin losses on washing.

Properties*

Physical form	Ivory-colored spherical beads
Matrix	Macroporous polystyrene
Functional Group	Secondary amine : at least 80 %
Ionic form as shipped	Free Base (FB)
Total exchange capacity	≥ 1.60 eq/L (FB form)
Moisture holding capacity	40 to 50 % (FB form)
Shipping weight	660 g/L
Specific gravity	1.035 to 1.065 (FB form)
Particle Size	
Uniformity coefficient	≤ 1.5
Harmonic mean size	0.600 to 0.800 mm
<0.300 ^a mm	0.2 % max
Maximum reversible swelling	FB → Cl ⁻ : 25 %

*These are typical properties, not to be construed as specifications.

Suggested Operating Conditions

Maximum operating temperature limit	90°C (FB form)
Service flow rate	2 to 8 BV ^b /h
Regeneration	
Regenerants	NaOH, NH3, Na2CO3
Level (g/L)	40 to 80 40 to 80 60 to 130
Concentration (%)	2 to 6 2 to 3 5 to 8
Minimum contact time	30 minutes
Slow rinse	2 BV at regeneration flow rate
Fast rinse	4 to 8 BV at service flow rate

a. Contractual Value, test methods available upon request.

b. 1 BV (Bed Volume)= 1 m³ solution per m³ resin

Figure 1: Bed Expansion

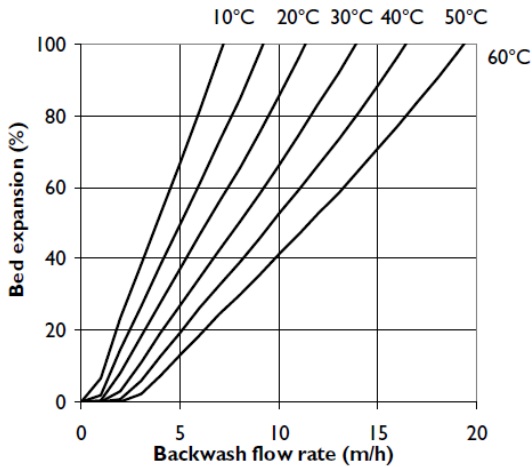
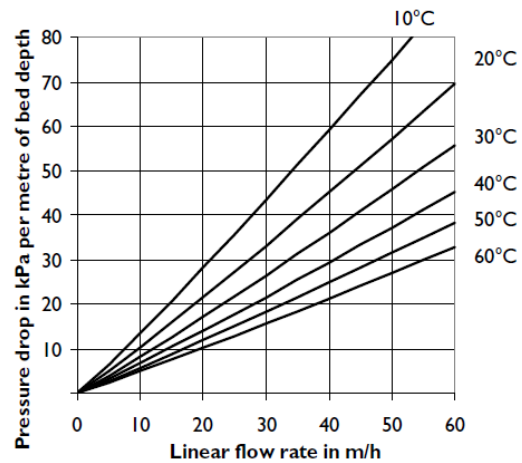


Figure 2: Pressure Drop



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