



AMBERLITE™ FPA58 Cl Resin

Food Grade Strong Base Anion Exchange Resin

For Food Processing Applications

Description

AMBERLITE™ FPA58 Cl Resin has been specially designed for use in food processing applications. It is an excellent resin of choice for ionic species removal and process stream purification.

Because of its acrylic polymeric matrix, it provides superior physical stability and organic fouling resistance to conventional polystyrene based resins. Less breakdown and less fouling yields longer life time within this type of application.

Typical Properties and Chemical Properties

AMBERLITE FPA58 Cl Resin is an acrylic, gel anionic exchange resin containing a quaternary amine function. The acrylic polymer matrix is extremely flexible providing excellent attrition and osmotic shock resistance.

The gel-type resin structure gives it higher capacity and longer run lengths than macroporous-type resins.

Physical form	White opaque beads
Matrix	Crosslinked acrylic gel structure
Functional groups	Quaternary ammonium
Ionic form as shipped	Chloride
Total exchange capacity	≥ 1.25 eq/L (Cl ⁻ form)
Moisture holding capacity	57–64% (Cl ⁻ form)
Shipping weight	730 g/L
Harmonic mean size	0.600–0.900 mm
Fine contents ^[1]	< 0.300 mm : 2.0% max

Test methods are available on request.

Suggested Operating Conditions

Maximum operating temperature	35°C (Cl form)
Minimum bed depth	700 mm
Service flow rate	2–10 BV*/h
Regenerant	NaCl (10%) + NaOH (0.2–0.5%)
Regenerant flow rate	2–4 BV/h
Regenerant level	160–240 g/L
Minimum contact time	60 minutes
Regenerant temperature	Up to 35°C
Slow rinse	2 BV at 2–4 BV/h
Fast rinse	4–8 BV at up to 12 BV/h

*1 BV (Bed Volume) = 1 m³ solution per m³ resin or 7.5 gals per ft³ resin

Hydraulic Characteristics

Figure 1 shows the bed expansion of AMBERLITE™ FPA58 CI Resin as a function of backwash flow rate and water temperature. Figure 2 shows the pressure drop data for AMBERLITE FPA58 CI Resin as a function of service flow rate.

Figure 1. Bed Expansion

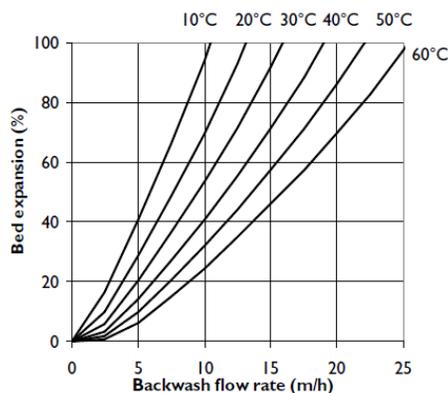
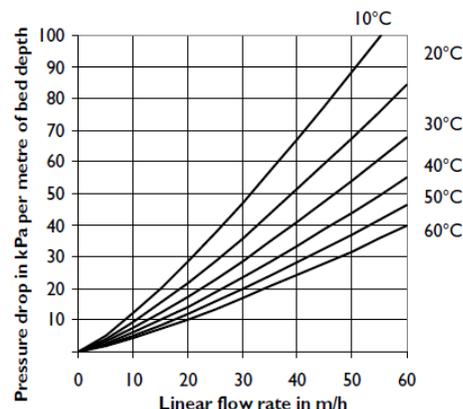


Figure 2. Pressure Drop



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Warning: Oxidizing agents such as nitric acid attack organic ion exchange resins under certain conditions. This could lead to anything from slight resin degradation to a violent exothermic reaction (explosion). Before using strong oxidizing agents, consult sources knowledgeable in handling such materials.

DOW™ Ion Exchange Resins

For more information about DOW™ resins, call the Dow Water & Process Solutions business:

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