



AMBERLITE™ IRA96RF

Industrial Grade Weak Base Anion Exchanger

Introduction

AMBERLITE IRA96RF resin is a macroreticular weak base anion exchange resin. Its very stable structure and limited reversible swelling make it very resistant to osmotic shock. The high degree of porosity of this resin provides efficient adsorption of large organic molecules and their desorption during regeneration, thus allowing excellent protection against organic fouling. AMBERLITE IRA96RF resin is intended primarily for the removal of strong acids from water following a strongly acidic cation exchange resin, and it provides excellent protection against organic fouling for the strong base anion exchange resin placed in the same vessel. The particle size distribution of AMBERLITE IRA96RF resin has been specifically selected to give optimum performance in packed bed and floating bed applications.

Properties

Physical form	Tan opaque spherical beads
Matrix	Styrene divinylbenzene copolymer
Functional group	Secondary amine : at least 85 %
Ionic form as shipped	Free Base (FB)
Total exchange capacity	≥ 1.25 eq/L (FB form)
Moisture holding capacity	57 to 63 % (FB form)
Shipping weight	670 g/L
Specific gravity	1.040 to 1.060 (FB form)
Particle size	
Uniformity coefficient	≤ 1.50
Harmonic mean size	0.630 to 0.830 mm < 0.300 mm 1.0 % max
Reversible swelling	FB → Cl ⁻ ≤ 15 %

Suggested Operating Conditions

Maximum operating temperature	60 °C
Minimum bed depth	700 mm
Service flow rate	5 to 40 BV*/h
Regeneration	
Regenerant	NaOH
Level	120 % of ionic load
Concentration	2 to 4 %
Minimum contact time	30 minutes
Slow rinse	2 BV at regeneration flow rate
Fast rinse	4 to 8 BV at service flow rate

Hydraulic Characteristics

Figure 1 shows the bed expansion of AMBERLITE IRA96RF resin as a function of backwash flow rate and water temperature.

Figure 2 shows the pressure drop data for AMBERLITE IRA96RF resin as a function of service 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. These data are valid for water treatment and have to be corrected according to the solution to be treated.

Figure 2: Pressure Drop

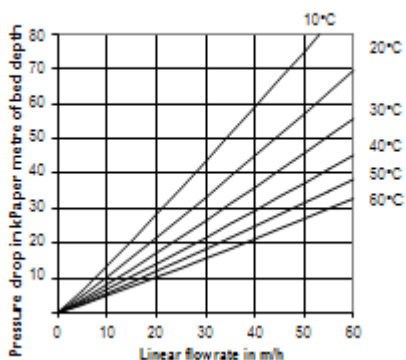
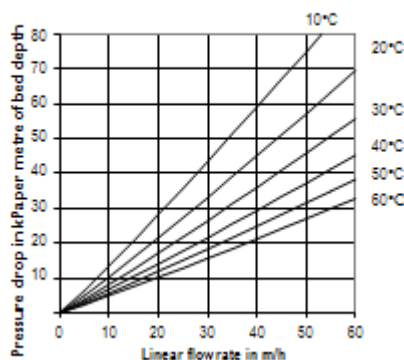


Figure 2: Pressure Drop



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

North America: 1-800-447-4369
 Latin America: (+55) 11-5188-9222
 Europe: +800-3-694-6367
 Italy: +800-783-825
 South Africa: +0800 99 5078
 Pacific: +8007776 7776
 China: +400 889-0789

<http://www.dowwaterandprocess.com>

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