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## AMBERLITE™ IRA96

Industrial Grade Weak Base Anion Exchanger

### Introduction

AMBERLITE IRA96 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 IRA96 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 downstream in a deionization plant.

### Properties

Physical form	Tan opaque spherical beads
Matrix	Styrene divinylbenzene copolymer
Functional group	Tertiary 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
Particle size	
Uniformity coefficient	≤ 1.80
Harmonic mean size	0.550 to 0.750 mm < 0.300 mm 1.0 % max
Reversible swelling	FB → Cl <sup>-</sup> ≤ 15 %

### Suggested Operating Conditions

Maximum operating temperature	60 °C		
Minimum bed depth	700 mm		
Service flow rate	5 to 40 BV*/h		
Regenerant	NaOH	NH <sub>3</sub>	Na <sub>2</sub> CO <sub>3</sub>
Level (% of ionic load)	120	150	200
Concentration (%)	2 to 4	2 to 6	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		

### Hydraulic Characteristics

Figure 1 shows the bed expansion of AMBERLITE IRA96 resin as a function of backwash flow rate and water temperature.

Figure 2 shows the pressure drop data for AMBERLITE IRA96 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 1: Bed Expansion

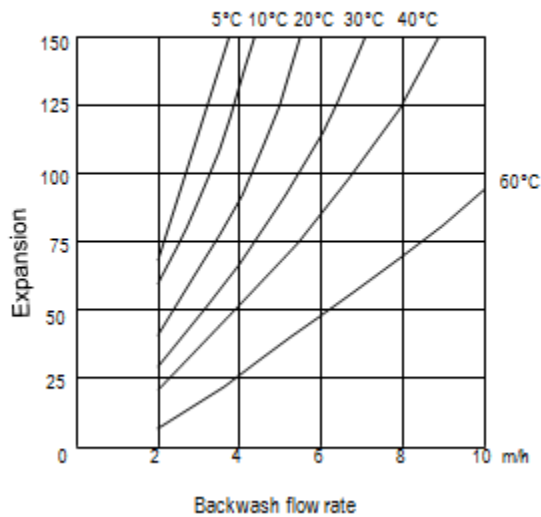
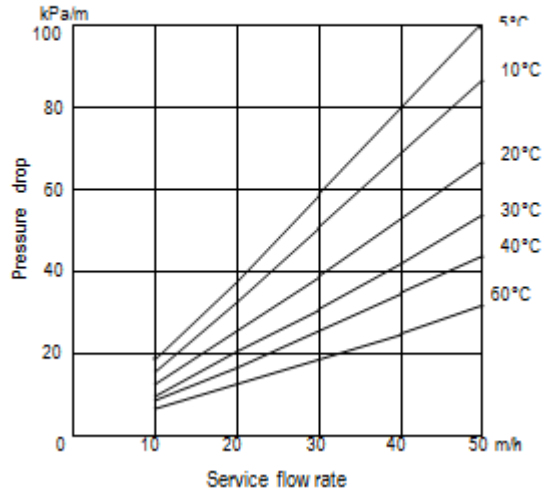


Figure 2: Pressure Drop



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

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