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## AMBERLITE™ 200C Na

Industrial Grade Strong Acid Cation Exchange Resin

AMBERLITE 200C Na resin is a macroporous strong acid cation exchange resin based on sulfonic acid exchange groups on a polystyrene matrix. Its high degree of crosslinking imparts superior stability to the macroreticular structure of the resin. This gives it far greater resistance to chemical oxidation and higher stability to breakdown from mechanical, thermal or osmotic shocks than any other commercially available cation resins. AMBERLITE 200C Na is recommended for make up demineralisation, hot process softeners, sodium cycle condensate polishers, and other systems involving appreciable oxidative potential or high temperatures.

### Introduction

### Properties

Physical Form	Grey spherical beads
Matrix	Styrene divinylbenzene copolymer
Functional group	Sulfonic acid
Ionic form as shipped	Na <sup>+</sup>
Total exchange capacity	≥1.70 eq/L (Na <sup>+</sup> form)
Moisture holding capacity	46 - 52 % (Na <sup>+</sup> form)
Shipping weight	800 g/L
Particle Size	
Uniformity coefficient	≤ 1.70
Harmonic mean size	0.600 – 0.850 mm < 0.355 mm 1.0 % max
Maximum reversible swelling	Na <sup>+</sup> → H <sup>+</sup> ≤ 6 %

### Suggested Operating Conditions

Water Treatment			
Maximum operating temperature	150 °C		
Service flow rate	5 to 40 BV*/h		
Regeneration			
Regenerant	HCl	H <sub>2</sub> SO <sub>4</sub>	NaCl
Level (g/L)	40 to 100	40 to 200	80 to 300
Concentration (%)	5 to 8	0.7 to 6	10
Minimum contact time	30 minutes		
Slow rinse	2 BV at regeneration flow rate		
Fastrinse	2 to 4 BV at service flow rate		

\* 1 BV (Bed Volume) = 1 m<sup>3</sup> solution per m<sup>3</sup> resin

### Hydraulic Characteristics

Figure 1 shows the bed expansion of AMBERLITE 200C Na as a function of backwash flow rate and water temperature. Figure 2 shows the pressure drop data for AMBERLITE 200C Na, 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.

Fig. 1: Bed Expansion

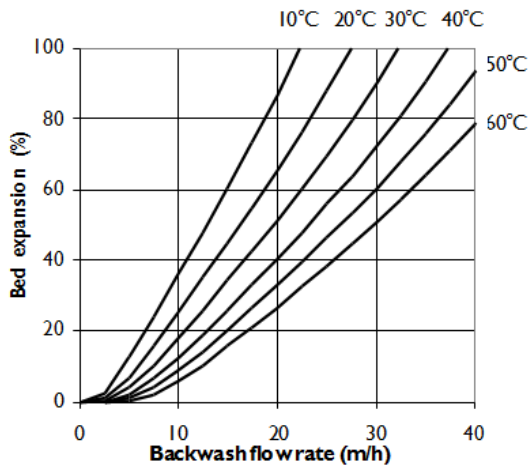
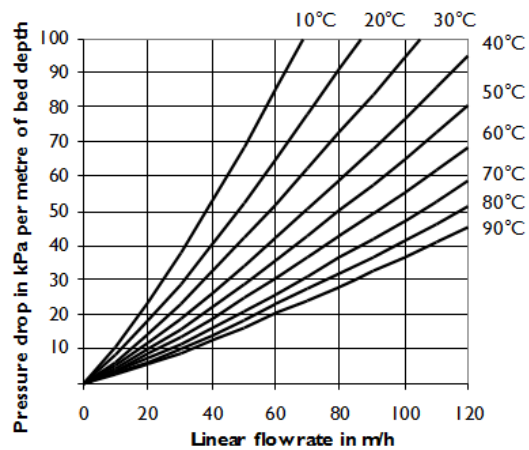


Fig. 2: Pressure Drop



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