



AMBERLITE™ 200C Na

Industrial Grade Strong Acid Cation Exchange Resin

Introduction

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.

Properties

| | |
|-----------------------------|----------------------------------------|
| Physical Form | Grey spherical beads |
| Matrix | Styrene divinylbenzene copolymer |
| Functional group | Sulfonic acid |
| Ionic form as shipped | Na ⁺ |
| Total exchange capacity | ≥1.70 eq/L (Na ⁺ form) |
| Moisture holding capacity | 46 - 52 % (Na ⁺ 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 ⁺ → H ⁺ ≤ 6 % |

Suggested Operating Conditions

| Water Treatment | | | |
|-------------------------------|--------------------------------|--------------------------------|-----------|
| Maximum operating temperature | 150 °C | | |
| Service flow rate | 5 to 40 BV*/h | | |
| Regeneration | | | |
| Regenerant | HCl | H ₂ SO ₄ | 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 m³ solution per m³ 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

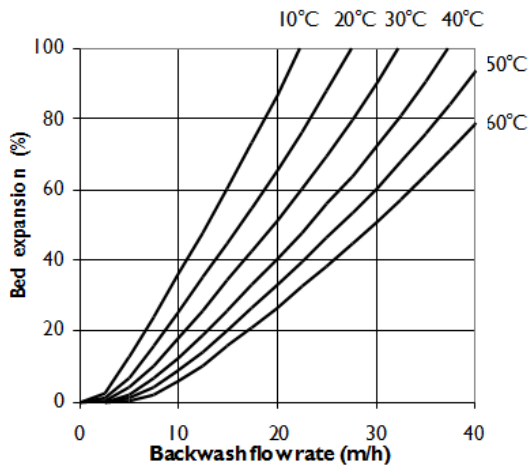
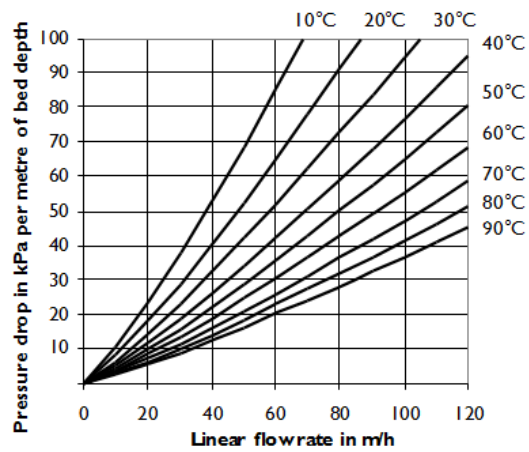


Fig. 2: Pressure Drop



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