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## AMBERLITE™ 252RF H

Industrial Grade Strong Acid Cation Exchanger

AMBERLITE 252RF H resin is a macroporous cation exchange resin based on sulfonated cross-linked polystyrene, specially developed for packed bed and floating bed applications such as AMBERPACK™ systems. AMBERLITE 252RF H resin is designed to provide good regeneration efficiency while maintaining a macroporous structure that is very resistant to osmotic shock and mechanical attrition.

### Introduction

### Properties

Physical Form	Light grey spherical beads
Matrix	Styrene divinylbenzene copolymer
Functional group	Sulfonic acid
Ionic form as shipped	H <sup>+</sup>
Total exchange capacity	≥ 1.70 eq/L (H <sup>+</sup> form)
Moisture holding capacity	52 to 58 % (H <sup>+</sup> form)
Shipping weight	780 g/L
Particle Size	
Uniformity coefficient	≤ 1.60
Harmonic mean size	0.600 to 0.800 mm < 0.300 mm 0.1 % max
Maximum reversible swelling	Na <sup>+</sup> → H <sup>+</sup> ≤ 10 %

### Suggested Operating Conditions

Water Treatment	
Maximum operating temperature	135 °C
Minimum bed depth	1400 mm
Service flow rate	5 to 40 BV*/h
Regeneration	
Regenerants	HCl      H <sub>2</sub> SO <sub>4</sub>
Level (g/L)	45 to 100    50 to 120
Concentration (%)	4 to 10      1 to 5
Minimum contact time	30 minutes
Slow rinse	2 BV at regeneration flow rate
Fast rinse	2 to 4 BV at service flow rate

### Hydraulic Characteristics

Figure 1 shows the bed expansion of AMBERLITE 252RF H resin as a function of backwash flow rate and water temperature. Figure 2 shows the pressure drop data for AMBERLITE 252RF H resin, as a function of service flow rate and water temperature. Pressure drop data are valid at the start of the service run with a clear water and a correctly classified bed.

Fig. 1 : Bed Expansion

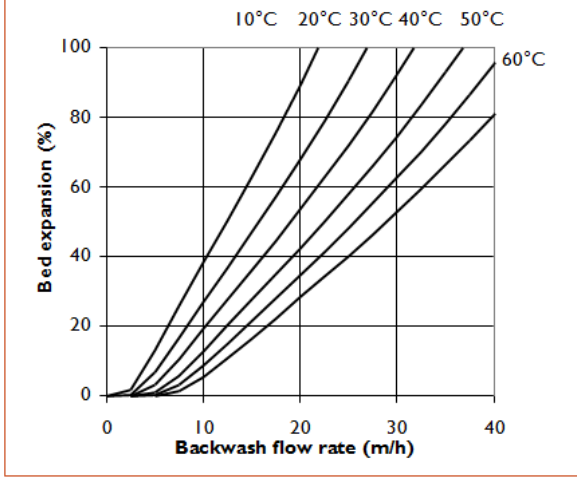
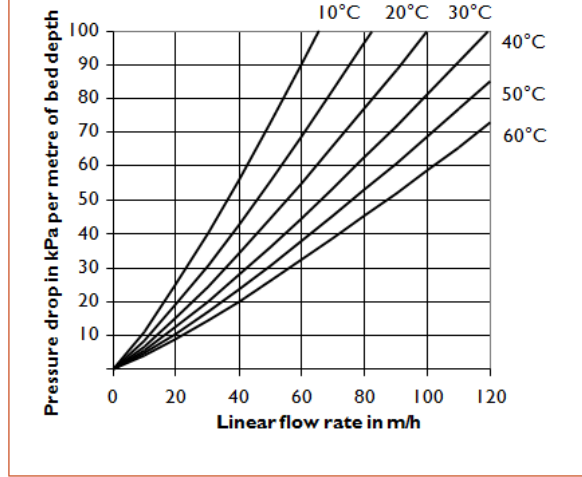


Fig. 2 : Pressure Drop



**AMBERLITE™ 252RF H**

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