



AMBERJET® 1500 H

Industrial Grade Strong Acid Cation Exchanger

PRODUCT DATA SHEET

AMBERJET 1500 H is a uniform particle size, premium grade, gelular, cation exchange resin designed to be used in mixed bed applications commonly encountered in power plant, high flow rate condensate polishing. Its sulphonated styrene divinylbenzene copolymer structure is formulated to provide high capacity coupled with exceptional physical and chemical stability. These properties make AMBERJET 1500 H the ideal choice for use in regenerable mixed bed

applications combined with AMBERJET 4400 (Cl or OH form). The uniform particle size distribution of AMBERJET 1500 H has been specifically selected to give optimum performance in AMBERPACK™ systems, reverse flow packed bed demineralisation configuration.

AMBERJET 1500 H resin is supplied in the hydrogen form.

PROPERTIES

Matrix _____	Styrene divinylbenzene copolymer
Functional groups _____	Sulphonates
Physical form _____	Dark amber beads
Ionic form as shipped _____	H ⁺
Total exchange capacity ^[1] _____	≥ 2.0 eq/L (H ⁺ form)
Moisture holding capacity ^[1] _____	45 to 51 % (H ⁺ form)
Specific gravity _____	1.28 to 1.32 (Na ⁺ form)
Shipping weight _____	820 g/L
Particle size _____	
Uniformity coefficient ^[1] _____	≤ 1.20
Harmonic mean size _____	650 ± 50 µm
Fine contents ^[1] _____	< 0.425 mm : 0.5 % max
Maximum reversible swelling _____	Na ⁺ → H ⁺ : 10 %

^[1] Contractual value

Test methods are available on request.

SUGGESTED OPERATING CONDITIONS

Service flow rate _____	10 to 120 BV/h
Regenerant _____	HCl H ₂ SO ₄
Level (g/L) _____	80 to 200 125 to 250
Concentration (%) _____	5 to 6 1.5 to 4
Flow rate (BV/h) _____	4 to 5 4 to 12
Minimum contact time _____	30 minutes
Slow rinse _____	2 BV at regeneration flow rate
Fast rinse _____	1 to 3 BV at service flow rate

* 1 BV (Bed Volume) = 1 m³ solution per m³ resin

LIMITS OF USE

AMBERJET 1500 H is suitable for industrial uses. For all other specific applications such as pharmaceutical, food processing or potable water applications, it is recommended that all potential users seek advice from Rohm and Haas in order to determine the best resin choice and optimum operating conditions.

HYDRAULIC CHARACTERISTICS

Figure 1 shows the bed expansion of AMBERJET 1500 H as a function of backwash flow rate and water temperature.

Figure 2 shows the pressure drop data for AMBERJET 1500 H, 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.

Figure 1: Bed Expansion

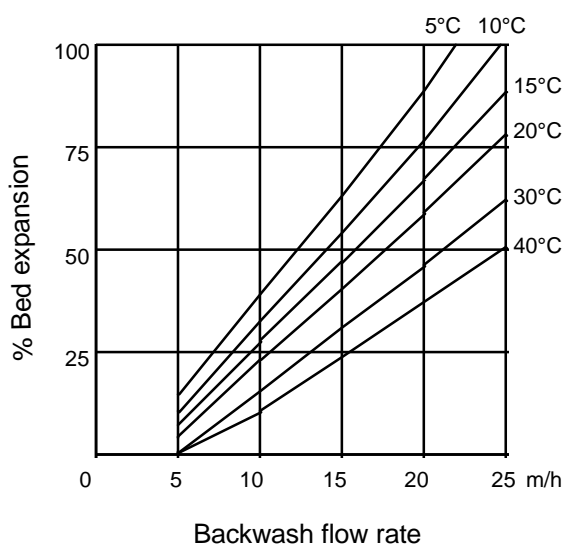
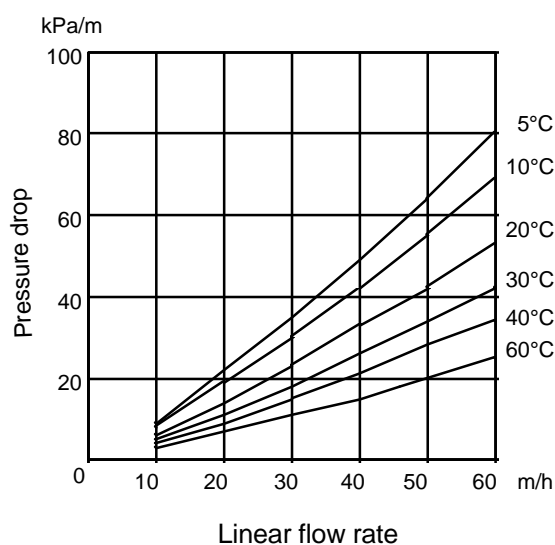


Figure 2 : Pressure Drop



All our products are produced in ISO 9002 certified manufacturing facilities.

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