



AMBERLITE® 252 H

Industrial Grade Strong Acid Cation Exchanger

PRODUCT DATA SHEET

AMBERLITE 252 H is a macroporous cation exchange resin based on sulphonated crosslinked polystyrene. It has a moderate degree of crosslinking resulting in good regeneration efficiency. It is very resistant to osmotic shock and to mechanical attrition.

AMBERLITE 252 H is suited for use in a variety of demanding applications, such as condensate polishing or treatment of oxidising solutions. AMBERLITE 252 H has a reduced amount of fines, allowing it to be used at high flow rate or in conventional reverse flow regenerated units.

PROPERTIES

Matrix _____	Styrene divinylbenzene copolymer
Functional groups _____	-SO ₃ ⁻
Physical form _____	Light grey beads
Ionic form as shipped _____	H ⁺
Total exchange capacity ^[1] _____	≥ 1.7 eq/L (H ⁺ form)
Moisture holding capacity ^[1] _____	52 to 58 % (H ⁺ form)
Shipping weight _____	780 g/L
Specific gravity _____	1.24 to 1.28 (Na ⁺ form)
Particle size _____	
Uniformity coefficient _____	≤ 1.6
Harmonic mean size _____	600 - 800 µm
Fine contents ^[1] _____	< 0.300 mm : 1.0 % max
Coarse beads _____	> 1.180 mm : 10 % max
Maximum reversible swelling _____	Na ⁺ → H ⁺ : 10 %

^[1] Contractual value

Test methods are available on request.

SUGGESTED OPERATING CONDITIONS

Minimum bed depth _____	700 mm
Service flow rate _____	5 to 170 BV*/h (5 to 120 m/h)
Regenerant _____	HCl H ₂ SO ₄
Flow rate (BV/h) _____	4 to 6 4 to 12
Concentration (%) _____	4 to 10 1 to 5
Level (g/L) _____	45 to 150 50 to 200
Minimum contact time _____	30 minutes
Slow rinse _____	2 BV at regeneration flow rate
Fast rinse _____	2 to 4 BV at service flow rate

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

