AMBERLITE® 252RF H
Industrial Grade Strong Acid Cation Exchanger

PRODUCT DATA SHEET

AMBERLITE 252RF H is a macroporous cation exchange resin based on sulphonated cross-linked polystyrene, specially developed for packed and floating bed applications such as AMBERPACK systems.

AMBERLITE 252RF H has a moderate degree of crosslinking resulting in good regeneration efficiency. It is very resistant to osmotic shock and to mechanical attrition.

PROPERTIES

Matrix ________________________________ Styrene divinylbenzene copolymer
Functional groups______________________ -SO₃⁻
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 - 58 % (H⁺form)
Specific gravity _________________________ 1.24 to 1.28 (Na⁺form)
Shipping weight _________________________ 780 g/ L
Particle size
Uniformity coefficient ___________________ ≤ 1.60
Harmonic mean size ____________________ 600 - 800 µm
Fine contents [1] ________________________ <0.300 mm : 0.1 % max
Maximum reversible swelling______________ Na⁺ → H⁺: 10 %

[1] Contractual value
Test methods are available on request.

SUGGESTED OPERATING CONDITIONS

Minimum bed depth _____________________ 1400 mm
Service flow rate ______________________ 5 to 40 BV*/ h
Regenerant ____________________________ HCl, H₂SO₄
Flow rate (BV/h) ________________________ 4 to 6, 4 to 12
Concentration (%) ______________________ 4 to 10, 1 to 5
Level (g/ L) ____________________________ 45 to 100, 50 to 120
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
HYDRAULIC CHARACTERISTICS

AMBERLITE 252RF H gives a pressure drop of about 12 kPa/m bed depth per 10 m/h at 15°C. A backwash flow rate of 20 m/h gives a bed expansion of about 70% at 15°C. Pressure drop data are valid at the start of the service run with a clear water and a correctly classified bed.

LIMITS OF USE

AMBERLITE 252RF H is suitable for industrial uses. For 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.

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