Felite[™] Resin FMB401-BNG



SAC / SBA, Gel Ratio: 2:3 Standard Mesh Size H+ / OH- form

Felite™ FMB401-BNG is the mixture of Felite™ FC108-MHB (Mono polymerized, hydrogen form strong acid cation resin) and Felite™ FA127-MOH (Mono polymerized, hydroxide form type I strong base anion resin) with the ratio 2:3.

Felite™ FMB401-BNG is designed to produce very high water quality and to separate easily for regeneration. It is intended to use in all mixed bed deionization applications that require high resistivity and high capacity.

Felite™ FMB401-BNG is particularly well suited for portable exchange and other polishing applications. It's supplied ready to use form, and achieves resistivity of 15+ megohms upon initial application.

Applications:

- PEDI
- Window Washing; Solar Panel Washing;
- Car Washing; RV Washing;

TYPICAL PHYSICAL & CHEMICAL CHARACTERISTICS:		
Polymer Structure	Styrene/DVB, Gel	
Appearance	Spherical Beads	
Functional Group	Sulfonic Acid	Quaternary Amine, Type I
lonic form, as shipped	99% H+	90% OH-
Total Capacity (mmol/ml)	2.0 min. (Na+)	1.4 min. (CI-)
Ratio	2:3	
Moisture Retention	50 -60%	
Particle Size Range (mm)	0.3 - 1.2 (≤0.3mm, 1% max.; > 1.2mm, 5% max.)	
Uniformity Coefficient (max.)	1.7	
Shipping Weight (g/L, approx.)	700 - 740 (43 lb/ft³)	
Temperature Limit (Regenerable Bed) Temperature Limit (Non-Regenerable Bed)	60°C (140°F) 100°C (212°F)	
Stability, pH Range	0 - 14	

PACKAGING:



25 Litres / 1 cu.ft PE Bag; 48 / 42 Bags Per Pallet; 20 Pallets Per 20ft Container





PERFORMANCE

Operating capacity

The following formula gives an approximate determination of volume that can be treated:

$$BV = \frac{500}{TDS}$$

BV (Bed Volume) is the number of litres of a water containing a TDS (Total Dissolved Solids) given in meq/L that can be demineralised with one litre of the resin mixture when run to exhaustion.

Regeneration

If required, Felite[™] FMB401 resin can be regenerated after exhaustion. Both components must be separated by backwashing and regenerated separately.

LIMITS OF USE

Felite™ FMB401 resin 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 Felite™ Resin Technology in order to determine the best resin choice and optimum operating conditions.

TREATED WATER CONDUCTIVITY

In polishing applications, say with a feed of less than 10 μ Crm, the resins Felite[™] FMB401 resin should produce a water with less than 0.1 μ Crm. In cases where the feed water has high conductivity (up to say 500 μ Crm) the water should still have less than 1 μ Crm.

SUGGESTED OPERATING CONDITIONS:

Minimum Bed Depth 700mm

Service Flow Rate 20 - 40 BV*/h

Regeneration

- Regenerants

Cation component: HCI / H₂SO₄

Anion component: NaOH

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