POLYMEX™
Resins

Strong Acid Cation Exchange Resin (SAC - C 25 DM Industry Grade)

SAC-C25 DM is a gel-type strong acid cation exchange resin having a 7% cross-linked polystyrene matrix with sulphonic acid as a functional group. The resin has good operational capacity under various raw water qualities. It also provides excellent physical stability. The resin is supplied with standard beads size distribution to give optimum operating capacity with minimum ion leakage and also minimum pressure drop across the resin bed. The resin is available in both Na+ and H+ form.



SAC-C25 DM is also available with varied particle size to match specific requirement, under different grades, the details are available with our technical service department.

Properties

Matrix	Cross linked polystyrene
Functional Group	SO_3 Sulfonic
Ionic Form	H+
Physical Form	Hard moist beads
Particle size (mm)	0.315-1.25
Moisture content %	50-55 H+ form
Total Exchange Capacity (Min) eq/ltr | (Min)mmol/g	≥1.75 H+ form ≥4.5 H+ form
Bulk density or shipping weight gms/ltr	H+ form 740-800
Operating pH range	0-14
Solubility in common solvents	Insoluble
Operating Temperature? (max)	120
Volume change% (max):Na+ to H+	10

Suggested Operating Conditions

Bed Depth	Meter	1.0-3.0
Regenerant Concentration	%	4-10 NaCl 2-5 HCl 2-4 H_2SO_4
Regenerant Flow Rate	Meter/Hour	5-8
Regenerant Contact Time	Minutes	30-60
Regeneration Level 100%	Kgs/m3 of resins	75-150 NaCl 40-100 HCl 75-150 H_2SO_4
Rinse Flow Rate	Meter/Hour	10-20
Rinse Time	Minutes	30
Running Flow Rate	Meter/Hour	10-40

APPLICATIONS: The resin has excellent physical strength and is highly resistant to osmotic shock. SAC-C25 DM is generally used for demineralisation applications, and it gives very low level of sodium leakage. For demineralisation applications, SAC-C25 DM is recommended to get high-purity water, depending on the raw water quality. In polishing units, the MB grade of SAC-C25 DM along with the MB grade of SBA-TYPE II is recommended for mixed-bed units to obtain high purity of water required for high pressure boiler and steam generator.

CAUTION: Strong oxidizing agents like nitric acid can cause explosive type reaction, when mixed with Ion Exchange resins. Knowledgeable sources should be consulted in the handling of this material.

NOTE: Ion Exchange Resins are sold on a volume basis, but are packed and shipped by weight. The shipping weight for each resin is fixed & does not take into consideration the variations in density and moisture content allowed within the product specifications. Therefore although the weight of the material is constant, there may be slight variations in volume, reflecting batch to batch variation of density and moisture content..

Packaging

Super Sack	1000L
PP/PE Bag	25L
PP/PE Bag	25Kgs

STORAGE CONDITIONS: The resin supplied in drums or bags should be stored in cool shed (warehouse) away from direct sunlight & should be periodically damped with clean water.