POLYMEX™
Resins

ION Exchange Resin - C 25 Na

Product Description

Polymex Resin is a high-capacity, strongly acidic cation exchanger in bead form. It is based on cross-linked polystyrene and has a gel structure. The resin contains sulphonic acid functional groups. It is supplied moist in the sodium form.



Applications

Polymex Resin is used most widely in sodium form for water softening applications. It can be used also in two stage de-ionising as the cation exchanger in the hydrogen cycle.

Polymex C25 Na Strong Acid Polystyrene - Type Cation Resin

Polymex C25Na is a strong acid polystyrene-gel type cation resin

Features

- High exchange capacity
- High mechanical strength
- Uniform particles with good hydraulic characteristics
- Good Selectivity
- Good Thermo-tolerant characteristics
- Excellent physical and chemical stability

Specification

Polymer structure	Styren-DVB
Functional group	HSO_{3-}
Appearance	Light brown bead
Ionic form	Na^+ type
Total exchange capacity	≥ 4.5 mmol/g(dry) (Na^+ type)
Total exchange capacity	≥ 1.9 mmol/ml (Na^+ type)
Moisture content	46-50% (Na^+ type)
Density	1.25-1.29 g/ml (Na^+ type)
Shipping weight	0.77.087 g/ml (Na^+ type)
Particle size	0.315-1.25 mm ≥ 95% <0.315mm ≤ 1%
Effective particle size	0.40-0.60mm
Uniformity coefficient	≤ 1.7
Attrition rate	90%
Swell, Max	Na^+ -H^- 10%

Operational Parameters

Operating temperature, Max.	120°C
Bed depth, Min	800mm
Service flow rate	5-25 BV^+ /h
Service flow rate	40 m/h
Regenerant	NaCl HCl H_2S0_4
Consumption (as 100%)	80-220g/l 50-150g/l 80-240g/l
Concentration	5-10% 5-8% 0.7-6%
Flow rate	2-8 BV^+ /h 2-5 BV^+ /h 2-20 BV^+/h
Contact time, Min	30 min
Slow rinse	2 BV^+ (Regeneration flow)
Fast rinse	4-8 BV^+ (Service flow)
Note: 1 BV = 1 m^3 media/1m^3 resin	

Packing

HOPE Lined bags 25/50 Its LOPE bags 1 cft/25Its Super sack 1000 Its Super sack 35 cft MS drums Fiber drums with liner bags 180 Its with liner bags 7cft

Storage

Ion exchange resins require proper care at all times. The resin must never be allowed to dry out. Regularly open the plastic bags and check the condition of the resin when in storage. If not moist, add enough clean demineralised water and keep it in fully moist condition. Always keep the resin drum in the shade. Recommended storage temperature is between 20 °C and 40 °C