INDION CST

Description

INDION CST is a strongly acidic cation exchanger resin based on 'Two-component ion exchange resin' technology. It is cross-linked polystyrene and has a gel structure. The resin contains sulphonic acid functional groups at the outer component. It is supplied moist in the sodium form as well as the hydrogen form.

Applications

INDION CST has an inert inner component and functionalized outer component, which results in a shorter diffusion path, fast exchange, reduced leakage, and lower water requirement.

It is used most widely in sodium form for water-softening applications. Irreversible fouling (heavy metal on the inner component of the resin bead) is less likely possible as the inner component of the resin bead is not functionalized.

Characteristics

Appearance	Moist, translucent, golden yellow to brown beads
Matrix	Styrene divinylbenzene copolymer
Functional Group	Sulphonic acid
Ionic form as supplied	Sodium
Total exchange capacity in Na form	1.8 eq/l, minimum
Moisture holding capacity in Na ⁺ form	42 - 49%
Shipping weight	800 - 850 g/l
Particle size range	0.3 to 1.0 mm

> 1.0 mm	5.0%, maximum
< 0.3 mm	1.0%, maximum
Uniformity co-efficient	1.7, maximum
Effective size	0.45 to 0.60 mm
Maximum operating temperature	120°C
Operating pH range	7.5 to 9.0
Volume expansion (Na ⁺ to H ⁺)	10% maximum
Foreign Particles	Should be absent

Weight of resin, as supplied, occupying 1m3 in a unit after backwashing and draining.

Packing

HDPE Lined bags: 25/50 ltrs LDPE bags: 1 cft / 25 ltrs Super sack: 1000 ltrs Super sack: 35/40/42 cft

MS/HDPE drums with liner bags: $180/200 \text{ ltrs} \pm 7\%$

Fiber drums with liner bags: cft

Storage

Ion exchange resins require proper care at all times. The resin must never be allowed to become dry. 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 completely moist condition. Always keep the resin drum in the shade. Recommended storage temperature is between 20°C and 40°C.

Safety

Acid and alkali solutions used for regeneration are corrosive and should be handled in a manner
that will prevent eye and skin contact. If any oxidising agents are used, necessary safety
precautions should be observed to avoid accidents and damage to the resin.

INDION range of Ion Exchange resins are produced in a state-of-the-art ISO 9001 and ISO 14001 certified manufacturing facilities at Ankleshwar, in the state of Gujarat in India.

To the best of our knowledge the information in this publication is accurate. Ion Exchange (India) Ltd. maintains a policy of continuous development and reserves the right to amend the information given herein without notice.

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