

# **INDION®** 810

# **Description**

INDION 810 is a macroporous strongly basic Type 1 anion exchange resin. It is a high capacity, new generation resin based on crosslinked polystyrene matrix and has quaternary ammonium functional groups. INDION 810 is produced by a unique manufacturing technique, which gives it the optimum porosity and improved kinetics. It gives higher operating exchange capacity due to greater utilisation of the exchange sites as compared to other conventional macroporous resins. This feature, combined with its high basicity, permits the absorption of large-sized soluble organic molecules and their subsequent elution during regeneration. Thus, while INDION 810 ensures complete removal of soluble organics from the water, it exhibits excellent

resistance to organic fouling as compared to other conventional resins.

INDION 810 has very good stability against physical and chemical attrition. This results in lesser fines generation and therefore higher operating life for the resin.

INDION 810 is generally employed in demineralising applications of raw water containing high organic levels and also for use under rigorous conditions such as in condensate polishing. INDION 810 is recommended for use in the anion column as well as in the mixed bed column where it can act as an efficient polisher in combination with strong acid cation exchange resin INDION 225 H.

Characteristics	
Appearance	Off white to brown opaque beads
Matrix	Styrene divinyl benzene copolymer
Functional Group	Benzyl trimethyl amine
lonic form as supplied	Chloride
Total exchange capacity	1.0 meq/ml, minimum
Moisture holding capacity	56 - 63 %
Shipping weight*	640 - 700 kg/m³
Particle size range	0.3 to 1.2 mm
> 1.2 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	60° C in OH form, 90° C in CI form
Operating pH range	0 to 14

Volume change	Cl to OH, 15 - 20 %
Resistance to reducing agents	Good
Resistance to oxidizing agents	Generally good, chlorine should be absent
*Weight of resin, as supplied, occupying 1 m³ in a unit after backwashing and draining.	

## **Packing**

HDPE Lined bags : 25/50 lts

LDPE bags : 1 cft/25 lts

Super sack : 1000 lts

Super sack : 35/40/42 cft

MS/HDPE drums with liner bags : 180/200 Its

Fiber drums with liner bags : 7 cft

# **Storage**

lon 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 lon 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 contained 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.

**INDION**® is the registered trademark of Ion Exchange (India) Ltd.



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