INDION N-IP

Description

INDION N-IP is a Type 2 strong base anion exchange resin in bead form having benzyl dimethyl-ethanol-ammonium groups. These groups are less strongly basic than those in Type 1 resins, resulting in a higher regeneration efficiency with lower operating costs.

INDION N-IP is based on cross-linked polystyrene, and has an isoporous structure. INDION N-IP has a high capacity for the natural organic matter present in some surface waters and has excellent resistance to poisoning by this organic matter.

Characteristics

- **Appearance**: Translucent red brown beads
- **Matrix**: Styrene-EDMA copolymer
- **Functional Group**: Benzyl dimethyl ethanol amine
- **Ionic form as supplied**: Chloride
- **Total exchange capacity**: 1.2 meq/ml, minimum
- **Moisture holding capacity**: 45 - 53%
- **Shipping weight**: 690 kg/m³ approximately
- **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 0.55 mm
- **Volume change**: Cl to OH, 10-15% approximately
- **Maximum operating temperature**: 40°C
- **Operating pH range**: 0 to 14
- **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 & draining.*
Use of good quality regenerants

All ion exchange resins are subject to fouling and blockage of active groups by precipitated iron. Hence the iron content in the feed water should be low and the regenerant sodium hydroxide must be essentially free from iron and heavy metals. All resins, especially the anion exchangers are prone to oxidative attack resulting in problems such as loss of capacity, resin clumping, etc. Therefore sodium hydroxide should have as low a chlorate content as possible. Good quality regenerant of technical or chemically pure grade should be used to obtain best results.

Packaging

HDPE lined bags 25/50 lts
LDPE bags 1cft/25 lts
Super sack 1000 lts
Super sack 35 cft
MS drums with liner bags 180 lts
Fiber drums with liner bags 7 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 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.