

# INDION® 830 S

## Organic Scavenger

### Description

INDION 830 S is a macroporous grade polystyrenic strong base -type I anion exchanger having quaternary ammonium functional groups. The proper mix of loosely bound crosslinks and highly porous matrix provide it better adsorption kinetics for long chain organic molecules. Such type of molecules generally causes fouling of functional polymers. However, INDION 830 S does not face this problem because it is reversible in regeneration cycle. INDION 830 S is osmotically stable and is supplied in chloride form.

When used for the first time, it is necessary to give minimum 10 bed volumes of rinse with DM water

### Applications

As INDION 830 S resin has better affinity for colouring matters in chloride form, it can be effectively used as a decolouriser in the processing of sugars, starch hydrolysates, textile processing waste water etc. One of the proven applications of INDION 830 S is for removal of naturally occurring organics and colouring matter from ground water in Himalayan region. Several commercial installations incorporating INDION 830 S are already in use giving sparkling water in various hotels.

NOTE: Due to the complexity of structure and nature of dissolved organics in water and waste water, we suggest the user to evaluate the resin in the laboratory prior to use, for various applications.

Characteristics	
Appearance	Off white to brown opaque beads
Matrix	Styrene divinylbenzene copolymer
Functional Group	Quaternary ammonium
Ionic form as supplied	Chloride
Total exchange capacity	0.95 meq/ml, minimum
Moisture holding capacity	57 - 66%
Shipping weight*	640 - 700 kg/m <sup>3</sup>
Particle size range	0.3 to 1.2 mm
> 1.2 mm	5.0%, maximum
< 0.1 mm	1.0%, maximum
Uniformity co-efficient	1.7, maximum
Effective size	0.45 to 0.60 mm
Treatment flow rate	10-20 bv/h
Maximum operating temperature	80° C
Operating pH range	4 to 10 for organic removal

Resistance to reducing agents	Good
Resistance to oxidizing agents	Generally good, chlorine should be absent
<b>Impurities</b>	
Iron	80 mg/l maximum as Fe
Heavy Metals	40 mg/l maximum as Pb
Water soluble organics	0.2 mg KMnO <sub>4</sub> /ml, maximum
*Weight of resin, as supplied, occupying 1 m <sup>3</sup> 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 lts
Fiber drums with liner bags	:	7cft

## 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.



Certified by IAPMO according to NSF/ANSI/CAN 61 for Materials Safety Requirements only and to NSF/ANSI 372 for low lead.

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 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**<sup>®</sup> is the registered trademark of Ion Exchange (India) Ltd.



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### Manufacturing Units

India - Ankleshwar | Hosur | Patancheru | Rabale | Verna | Wada

Overseas - Bangladesh | Indonesia | Saudi Arabia | UAE

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