

# INDION® 870

## Description

INDION 870 is a macroporous weakly basic anion exchange resin. It is useful for the adsorption of acidic solutes from either aqueous or non-aqueous media.

INDION 870 is supplied in free base form. The basicity of primary amine functional group makes this resin capable of withstanding high temperature (upto 100 degree C) and useful in removal of mineral acid impurities like hydrochloric acid and sulphuric acid from their mixtures with organic acids such as citric acid and tartaric acid.

## Applications

A wide variety of chemical products require deacidification before they can be used, shipped or stored. The properties of Indion 870 are well suited for applications, such as:

- Removal of strong mineral acids from organic solvents.
- Deacidification of phenol/alkyl phenol streams.
- Separation of mineral acid impurities from weak organic acids.
- Deacidification (removal of Formic acid) of Dimethyl formamide.

### Characteristics

Appearance	Off white to brown opaque beads
Matrix	Styrene divinylbenzene copolymer
Functional Group	Primary amine
Ionic form as supplied	Free base
Total exchange capacity	1.6 meq/ml, minimum
Moisture holding capacity in Cl form	52 - 62%
Shipping weight*	640 - 690 kg/m <sup>3</sup>
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	0.40 to 0.55 mm
Maximum operating temperature	60° C in free base form, 80° C in hydrochloride form
Operating pH range	0 to 7
Volume change	Free base to Hydrochloride, 25 % Maximum

Resistance to reducing agents	Good
Resistance to oxidizing agents	Generally good, chlorine should be absent
*Weight of resin, as supplied, occupying 1m <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	:	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 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 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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India - Ankleshwar | Hosur | Patancheru | Rabale | Verna | Wada

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