

# INDION® 890

## Description

INDION 890 is a weak base anion exchanger containing tertiary amine and quaternary ammonium groups having a crosslinked poly-styrene matrix.

It has a macroporous structure which gives excellent mechanical strength and exceptional resistance to osmotic shock. It is supplied moist in free base form.

## Applications

INDION 890 has optimum operating capacity for removal of strong acids and is particularly suitable for use as a weak base anion exchanger preceding a strong base anion exchanger while treating process liquors containing a high proportion of free mineral acidity.

INDION 890 is specially recommended for use in non-water, pharma and speciality applications.

### Characteristics

Appearance	:	Off white to brown opaque beads
Matrix	:	Styrene divinyl benzene copolymer
Functional Group	:	Tertiary amine
Ionic form as supplied	:	Free base
Total exchange capacity	:	1.4 meq/ml, minimum
Moisture holding capacity (in Cl form)	:	52 - 56 %
Shipping weight *	:	<b>620 - 670 kg/m<sup>3</sup>, approximately</b>
Particle size range	:	0.3 to 1.2 mm
> 1.2 mm	:	5.0%, maximum
< 0.3 mm	:	1%, maximum
Uniformity co-efficient	:	1.7, maximum
Effective size	:	<b>0.40 - 0.55 mm</b>
Maximum operating temperature	:	60° C in free base 80° C in HCl 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

### Impurities

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 cft
MS drums		Fiber drums	
with liner bags	180 lts	with liner bags	7 cft

## Storage

Ion exchange resins require proper care at all times. The resins 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.

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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