

# INDION® 222 Na

## Description

INDION 222 Na is a high capacity strongly acidic cation exchanger in bead form. It is based on cross linked polystyrene and has a gel structure. The resin contains sulphonic acid functional groups. It is supplied moist in the sodium form.

## Applications

INDION 222 Na is used most widely in sodium form for water softening application. It can be used also in two-stage de-ionising as the cation exchanger in the hydrogen cycle.

### Characteristics

Appearance	:	Golden yellow beads
Matrix	:	Styrene divinylbenzene copolymer
Functional Group	:	Sulphonic acid
Ionic form as supplied	:	Sodium
Total exchange capacity	:	1.92 meq/ml, minimum
Moisture holding capacity	:	47 - 53 %
Shipping weight *	:	820 kg/m <sup>3</sup> , 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
Operating pH range	:	0 to 14
Maximum operating temperature	:	140° C
Resistance to reducing agents	:	Good
Resistance to oxidizing agents	:	Generally good, chlorine should be absent
Organic extractives	:	1 mg/l maximum in deionised water
(As per USFDA 21 CFR 173.25)	:	1 mg/l maximum in 15% v/v ethanol solution

### Impurities

Iron	:	100 mg/l maximum as Fe
Heavy Metals	:	20 mg/l maximum as Pb
Arsenic	:	3 mg/l maximum as As

\* 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	180 lts	Fiber drums	7 cft
with liner bags		with liner bags	

## 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. This product data sheet (issue 09/2008) replaces previous issues.

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



### CORPORATE OFFICE

Tiecicon House, Dr. E. Moses Road, Mahalaxmi, Mumbai 400 011  
Tel: 022-3989 0909 Fax: 022-2493 8737  
E-mail: ieil@ionexchange.co.in ; hocro@ionexchange.co.in

### INTERNATIONAL DIVISION

R-14, T.T.C MIDC, Thane-Belapur Road, Rabale, Navi Mumbai 400 705  
Tel: 022-3989 0909/3047 2400 Fax: 022-2769 7918  
E-mail: rabcrointl@ionexchange.co.in; export.sales@ionexchange.co.in

### REGIONAL OFFICES

- **Chennai** - Tel: 044-3910 2900/ 3989 0909 Fax: 044-2815 3361  
E-mail: checro@ionexchange.co.in
- **Delhi** - Tel: 011-3989 0909/3054 3200 Fax: 011-2577 4837  
E-mail: delcro@ionexchange.co.in
- **Kolkata** - Tel: 033-3989 0909/3043 3400 Fax: 033-2400 4345  
E-mail: calcro@ionexchange.co.in
- **Vashi** - Tel: 022-3989 0909/3913 2300 Fax: 022-2788 9839  
E-mail: mumcro@ionexchange.co.in

### BRANCH OFFICES

- **Bangalore** - Tel:-080-3251 6205, Cell:09341247700  
E-mail: bngcro@ionexchange.co.in
- **Chandigarh** - Tel: 0172-274 5011 Fax: 0172-274 4594  
E-mail: delcro@ionexchange.co.in
- **Hyderabad** - Tel: 040-3066 3101/02/03 Fax: 040-3066 3104  
E-mail: hydrcro@ionexchange.co.in
- **Lucknow** - Tel: 0522-301 3401/02 Fax: 0522- 301 3401  
E-mail: luk.general@ionexchange.co.in
- **Pune** - Tel: 020-3062 6160 Fax: 020-2714 6109  
E-mail: pun.general@ionexchange.co.in
- **Vadodara** - Tel: 0265-239 6506/6507 Fax: 0265-239 8508  
E-mail: brdcro@ionexchange.co.in
- **Vizag** - Tel: 0891-324 6253  
E-mail: sales.vizag@ionexchange.co.in

### FACTORIES

• Ankleshwar • Hosur • Patancheru • Rabale • Verna

**ALL INDIA NETWORK OF SERVICE COMPANIES AND DEALERS**

Visit us at : [www.ionindia.com](http://www.ionindia.com)