

# INDION® BSR

## Chelating Resin

### Description

INDION BSR is a chelating Ion Exchange resin having a macroporous structure. It has a crosslinked polystyrene matrix containing amino phosphonic acid functional groups. INDION BSR forms chelating complexes with metallic ions such as lead, copper, zinc, calcium, magnesium etc.

### Application

INDION BSR is very efficient for the removal of calcium, magnesium and other metals present, in trace

quantities (a few ppm) in concentrated brine to produce brine of a very high purity containing hardness less than 20 ppb and suitable for electrolysis of brine in membrane cells. INDION BSR can also be used for separation of zinc from media in which this metal is present for example corrosion preventive products in cooling towers. INDION BSR can be used to separate lead from industrial effluent ( oil refinery and battery wastes, solvents and wastes from paints and printing inks) industries.

### Characteristics

Appearance	:	Opaque off white to brown beads
Matrix	:	Macroporous crosslinked polystyrene
Functional Group	:	Amino phosphonic acid
Ionic form as supplied	:	Sodium
Total exchange capacity	:	1.2 meq/ml, minimum
Moisture holding capacity	:	55 - 65 %
Shipping weight *	:	750 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	:	0.40 to 0.50 mm
Maximum operating temperature	:	60 - 75° C
Operating pH range	:	8 to 11
Resistance to reducing agents	:	Good
Resistance to oxidizing agents	:	Generally good, chlorine should be absent

\* 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 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 - 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 oxidizing 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



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