

# INDION® GS 400

## Description

INDION GS 400 is a strong base Type II anion exchange resin based on cross linked polystyrene matrix with benzyl dimethyl ethanol amine functional groups. It has a gel structure with high physical strength. INDION GS 400 has high operating exchange capacity, excellent regeneration efficiency and very low rinse water requirements. INDION GS 400 is recommended as the anion exchange resin in the second stage of a de-ionising pair with the cation exchange resin INDION 225 H in the first stage.

INDION GS 400 is particularly recommended for use in a two-stage de-ionising plant for the removal of mineral acid anions and some silica, while keeping the running costs down. If treated water with the lowest possible level of residual silica is desired, this two-stage treatment should be followed by mixed bed de-ionisation using a strong acid cation resin INDION 225 H and a strong base Type I anion resin INDION GS 300.

Characteristics	
Appearance	Light yellowish to light brown colour beads
Matrix	Styrene divinylbenzene copolymer
Functional Group	Benzyl dimethyl ethanolamine
Ionic form as supplied	Chloride
Total exchange capacity	1.2 meq/ml, minimum
Moisture holding capacity	45 - 51%
Shipping weight*	660 - 720 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	0.45 to 0.60 mm
Maximum operating temperature	40° C in OH form, 75° C in Cl form
Operating pH range	0 to 14
Volume change	Cl to OH, 10 - 15%, approximately
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	:	35/40/42 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**<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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