

# INDION® FFIP

## Description

INDION FFIP is a Type 1 strong base, unfunctional anion exchanger in bead form, containing trimethyl benzyl ammonium groups. It is based on cross-linked polystyrene and has an isoporous structure. INDION FFIP has a very high basicity and is effective in removing weak acids such as silica and carbon dioxide.

INDION FFIP is recommended for use in two-stage/multiple-stage or mixed-bed deionising units where high-quality deionised water and the lowest silica residuals are desired.

Characteristics	
Appearance	Translucent red brown beads
Matrix	Styrene - EDMA copolymer
Functional Group	Benzyl trimethyl amine
Ionic form as supplied	Chloride
Total exchange capacity	1.2 meq/ml, minimum
Moisture holding capacity	47% - 55%
Shipping weight*	660 - 710 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
Volume change	Cl to OH, 10 - 15 %
Maximum operating temperature	60° C in OH form, 90° C in Cl and other forms
Operating pH range	0 to 14
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.



## ION EXCHANGE (INDIA) LTD.

### Corporate Office

Ion House, Dr. E. Moses Road, Mahalaxmi,  
Mumbai - 400011 | Tel: +91 22 6231 2000  
E-mail: ieil@ionexchange.co.in

### Regional and Branch Offices

Bengaluru | Bhubaneswar | Chandigarh | Chennai  
Delhi | Hyderabad | Kolkata | Lucknow | Vadodara  
Vashi | Visakhapatnam

### International Division

R-14, T.T.C MIDC, Thane - Belapur Road, Rabale,  
Navi Mumbai - 400 701 | Tel: +91 22 6857 2400  
E-mail: export.sales@ionexchange.co.in

### Overseas Offices

Bangladesh | Canada | Indonesia | Kenya  
Malaysia | Oman | Portugal | Saudi Arabia | Singapore  
South Africa | Sri Lanka | Tanzania | Thailand | UAE | USA

### Manufacturing Units

India - Ankleshwar | Hosur | Patancheru | Rabale | Verna | Wada

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