

INDION[®] TCR

Description

INDION TCR is a crosslinked macroporous ion exchanger having thio-uronium as functional groups. It has been specifically developed for the selective adsorption of mercury and precious metals. INDION TCR is completely insoluble in water and all common solvents. It is stable in acidic as well as alkaline pH range. INDION TCR has excellent physical stability due to its macroporous structure.

It is unaffected by reducing agents. However, INDION TCR can get decrosslinked in the presence of oxidising

agents such as chlorine, peroxides, permanganates etc. It is therefore essential to remove all the oxidants from the process stream, before it comes in contact with INDION TCR.

Applications

INDION TCR is specifically used for removing mercury and precious metals from waste water and other streams.

Characteristics

Appearance	:	Opaque off white to brown beads
Matrix	:	Crosslinked polystyrene
Functional group	:	Thio - uronium
Ionic form as supplied	:	Hydrogen
Total exchange capacity	:	1.6 meq/ml, minimum
Moisture holding capacity	:	41 - 47 %
Shipping weight *	:	690 kg/m ³ approximately
Particle size range	:	0.3 mm 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	:	80° C
Operating pH range	:	1 to 10
Volume change	:	H ⁺ to Hg ⁺² , -6 % approximately
Resistance to reducing agents	:	Good
Resistance to oxidising agents	:	Generally good, chlorine should be absent

* Weight of resin, as supplied, occupying 1 m³ 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 resin requires 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 is the registered trademark of Ion Exchange (India) Ltd.

ION EXCHANGE (INDIA) LTD.

Corporate Office

Ion House, Dr. E. Moses Road,
Mahalaxmi, Mumbai 400 011
Tel: +91 22 3989 0909 | Fax: +91 22 2493 8737
E-mail: ieil@ionexchange.co.in

International Division

R-14, T.T.C MIDC, Thane - Belapur Road,
Rabale, Navi Mumbai 400 701
Tel: +91 22 3989 0909 / 3913 2400 | Fax: +91 22 2769 7918
E-mail: export.sales@ionexchange.co.in

OFFICES

Regional	Telephone	Fax	E-mail
Chennai	+91 44 3989 0909 / 3910 2900	+91 44 2815 3361	checro@ionexchange.co.in
Delhi	+91 11 3989 0909 / 3054 3200	+91 11 2577 4837	delcro@ionexchange.co.in
Kolkata	+91 33 3989 0909 / 3043 3400	+91 33 2400 4345	calcro@ionexchange.co.in
Vashi	+91 22 3989 0909 / 3913 2300	+91 22 2788 9839	mumcro@ionexchange.co.in
Branch			
Bengaluru	+91 80 2204 2888	+91 80285 32002	bngcro@ionexchange.co.in
Bhubaneswar	+91 674 326 9525 / 257 1491		bbsr@ionexchange.co.in
Chandigarh	+91 172 274 5011	+91 172 274 4594	delcro@ionexchange.co.in
Hyderabad	+91 40 3066 3101 / 02 / 03	+91 40 3066 3104	hydcro@ionexchange.co.in
Lucknow	+91 522 319 9911	+91 11 2577 4837	lko.general@ionexchange.co.in
Vadodara	+91 265 302 7489 / 90	+91 265 2352 932	brdcro@ionexchange.co.in
Visakhapatnam	+91 891 324 6253		sales.vizag@ionexchange.co.in

Factories: Ankleshwar | Hosur | Patancheru | Rabale | Verna

All India Service and Dealer Network

www.ionresins.com