

# INDION® 404

# **Calcium Polystyrene Sulfonate**

## **Description**

INDION 404 is a high purity pharmaceutical grade strong acid cation exchange resin, supplied in calcium form as a free flowing powder.

Specifications of INDION 404 are as given in the British Pharmacopia (BP).

The parent material is manufactured in an ISO 9001 & ISO 14001 certified facility.

# **Applications**

INDION 404 removes potassium from the body by exchanging it within the gut for calcium. For the most part, this action occurs in the large intestine, which excretes potassium to a greater degree than does the small intestine.

Formulations containing INDION 404 are recommended for the treatment of hyperkalaemia associated with anuria and severe oliguria. It is also used to treat hyperkalaemia in patients requiring dialysis on regular haemodialysis or on prolonged peritoneal dialysis.

#### **Characteristics**

Appearance : Cream to light brown fine powder

Matrix : Crosslinked polystyrene co-polymer

Functional Group : Sulphonic acid

Ionic form as supplied : Calcium

Solubility : Insoluble in water and in Ethanol (96%)

## **Specifications**

Identification

By IR spectra : Complies with BP

Reaction C for Ca : Complies with BP

Loss on drying : 8%, maximum

Particle size distribution

Retained on 100 BSS mesh

(150 microns) : 1.0% maximum

Potassium exchange capacity : 1.3 to 2.0 meq/dry g

Potassium content : 0.1% w/w, maximum

Sodium content : 0.1% w/w, maximum

Calcium content : 6.5 to 9.5% w/w

Styrene : Complies with BP

Heavy metals content as Pb : Complies with BP

Arsenic content as As : Complies with BP

Microbial contamination : Complies with BP

## **Toxicity**

INDION 404 is a high molecular weight polymer. It is not soluble in water.

Experiments on mice have shown LD50 value of INDION 404 to be approximately 17,500 mg/kg body weight.

INDION 404 is not absorbed from the gastrointestinal tract.

## **Packing**

HDPE carbouys with inner double plastic liner bags

6 / 20 / 40 kgs

### Storage

INDION 404 is hygroscopic in nature. It is therefore essential to store it in a tightly packed container to prevent absorption of atmospheric moisture. If moisture is absorbed, the INDION 404 can be dried at 90° C to 100° C for approximately 6 hours to reduce the moisture content below 8%.

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.



#### CORPORATE OFFICE

lon House, Dr. E. Moses Road, Mahalaxmi, Mumbai 400 011 Tel: 022-3989 0909 Fax: 022-2493 8737

E-mail: ieil@ionexchange.co.in

#### INTERNATIONAL DIVISION

R-14, T.T.C MIDC, Thane-Belapur Road, Rabale, Navi Mumbai 400 701 Tel: 022-3989 0909/3047 2400 Fax: 022-2769 7918

E-mail: rabcrointl@ionexchange.co.in; export.sales@ionexchange.co.in

#### REGIONAL OFFICES

Chennai - Tel: 044-3989 0909/3910 2900 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**

• Bengaluru - Tel: 080-2204 2888

E-mail: bngcro@ionexchange.co.in

• Bhubaneswar - Tel: 0674-326 9525

E-mail: bbsr@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: hydcro@ionexchange.co.in

E-mail: hydero@ionexchange.co.in

• Lucknow - Tel: 0522-301 3401/02 Fax: 0522- 301 3401

E-mail: luk.general@ionexchange.co.in

• Vadodara - Tel: 0265-302 7489/90 Fax: 0265-239 8508

E-mail: brdcro@ionexchange.co.in

• Visakhapatnam - Tel: 0891-324 6253

E-mail: sales.vizag@ionexchange.co.in

FACTORIES : Ankleshwar • Hosur • Patancheru • Rabale • Verna
ALL INDIA SERVICE AND DEALER NETWORK

Visit us at : www.ionindia.com