

# *INDION*° 204

# Description

INDION 204 is a high purity pharmaceutical grade weak acid cation exchange resin, supplied in hydrogen form as a free flowing powder. It is suitable for pharmaceutical applications such as taste masking of bitter drugs. It is based on a cross linked polyacrylic matrix. INDION 204 is manufactured in a FDA approved manufacturing facility. The parent material is manufactured in an ISO 9001 and ISO 14001 certified facility.

# **Applications**

INDION 204 is used for masking the bitter taste of drugs such as Roxithromycin, Norfloxacin and many others. It can be administered in a variety of dosage forms such as suspension, dispersible tablets, lozenges and chewing gums. The principle behind the technique of making a tasteless formulation is very simple and does not involve major capital investment. A complex is made from the drug and INDION 204. The nature of the complex is such that the average cation concentration of about 40 meq / I and pH of 6.7 in saliva is not able to break the complex. The complex is weak enough to be broken down by the hydrochloric acid present in the stomach. Thus the complex is absolutely tasteless and stable with no after taste, but at the same time, its bio-availability is not affected.

# Toxicity

INDION 204 is a high molecular weight cross linked polymer. It is therefore not absorbed by body tissue and is totally safe for human consumption. Tests for toxicological tolerance show that it does not have any pronounced physiological action at recommended dosage levels and is definitely non-toxic. Experiments on mice have shown LD 50 value of INDION 204 to be approximately 4,500 - mg/kg body weight.

Characteristics			
Appearance	:	White to pale cream powder	
Matrix	:	Cross linked acrylic co - polymer	
Functional Group	:	Carboxylic acid	
Ionic form as supplied	:	Hydrogen	
Solubility	:	Insoluble in water and in common solvents.	
Specifications			
Particle size distribution			
Retained on 100 BSS mesh			
(150 microns)	:	1.0%, maximum	
Retained on 200 BSS mesh			
(75 microns)	:	45%, minimum	
Moisture content	:	5%, maximum	
lon exchange capacity	:	10 meq/dry g, minimum	
Iron content as Fe	:	100 ppm, maximum	
Heavy metals content as Pb	:	20 ppm, maximum	
Arsenic content as As	:	3 ppm, maximum	

## Packing

HDPE carbouys with inner double plastic liner bags

6 / 20 / 40 kgs

## Storage

INDION 204 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, INDION 204 can be dried at  $90^{\circ}$ C to  $100^{\circ}$ C for approximately six hours, to reduce the moisture content below 5 %.

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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