



**Indion® 454 Ion Exchange Resin**

**MATERIAL SAFETY DATA SHEET  
SDS/MSDS**

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : **Indion® 454 Ion Exchange Resin**

Product Code : 121430

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Industrial & for professional use only.

### 1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd  
7/28 Vardaan House  
Ansari Road Daryaganj  
New Delhi-110002  
INDIA

Telephone : +91 11 49404040

Email : [care@cdhfinechemical.com](mailto:care@cdhfinechemical.com)

### 1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

## SECTION 2: Composition/Information on Ingredients

Description	Concentration
Functionalised co-polymer	> 88 % (Styrene / divinylbenzene)
Moisture content	< 12 %

## SECTION 3: Hazards identification

Contact with eyes	Irritating to eyes (R36)
Contact with skin	Mildly irritating to skin.
Ecological hazards	May change the pH of receiving waters in case of major spillages.

#### **SECTION 4: First aid measures**

<b>Contact with skin</b>	Remove contaminated clothing. Remove particles and wash affected area with water.
<b>Contact with eyes</b>	Immediately wash out with plenty of water and remove all particles. Seek medical attention if irritation persists.
<b>Ingestion</b>	Give 200 – 300 ml water to drink. Never give anything by mouth to an unconscious person. Seek immediate medical attention.
<b>Inhalation</b>	Remove patient to fresh air. Seek medical advice.

#### **SECTION 5: Fire-fighting measures**

Incase of fire, use foam, carbon dioxide or dry agent.  
Substance evolves toxic fumes, wear self-contained breathing apparatus (see Section 10).  
Wear full protective clothing including chemical protection suit.  
Prevent run off water from entering drains if possible.  
If polluted water reaches drainage systems or water courses, immediately inform appropriate authorities.

#### **SECTION 6: Accidental release measures**

<b>Personal precautions</b>	Keep people away. Floor may be slippery, take care to avoid falls.
<b>Environmental precautions</b>	Do not allow to enter public sewers and water courses.
<b>Clean up actions</b>	Sweep-up and transfer to plastic containers for recovery or disposal, according to advice in section 13.

#### **SECTION 7: Handling and storage**

<b>Handling</b>	The usual precautions for handling chemicals should be observed. Risk of static discharge from dry beads.
<b>Storage</b>	

#### **SECTION 8: Exposure controls/personal protection**

<b>Exposure controls</b>	No special precautions are required for this product.
<b>Occupational exposure controls</b>	
<b>Respiratory protection</b>	Not required for normal operation
<b>Hand protection</b>	Wear suitable gloves
<b>Eye protection</b>	Wear safety glasses or goggles. An eyewash facility should be available.

**Skin protection**

Wear chemical protective overalls.

**SECTION 9: Physical and chemical properties****General information****Appearance**

Off - white coloured powder

**Physical state**

Solid

**Odour**

No odour

**Important information for human health, safety and environment****pH as supplied**

Neutral

**Boiling point**

Not applicable

**Flammability point**

The preparation starts burning over 230° C only if ignited.

**Flammability**

The preparation is not flammable before the evaporation of moistening water

**Explosive properties**

None

**Burning properties**

None

**Specific gravity**

1.27, approximately

**Solubility**

In water : virtually insoluble

In oil : insoluble

**Partition coefficient**

Not applicable

**n-octanol/water****Viscosity**

Not applicable

**Flash point**

Not applicable

**Melting point**

Not applicable

**Auto-ignition temperature**

Over 500° C

**SECTION 10: Stability and reactivity****Conditions to avoid**

This material is considered stable under normal conditions.

**Materials to avoid**

Incompatible with strong oxidizing agents.  
Contact with strong oxidizers, especially nitric acid, may produce low molecular weight organics that may form explosive mixtures.

**Hazardous decomposition products**

Combustion products may include monomers, residual organics, carbon and sulphur oxides.

## SECTION 11: Toxicological information

### Toxicological Information

No data are available for this material. The information given is based on properties of materials with similar composition.

LD 50 (Oral, Rat) : 3000 mg/kg of body weight  
LD 50 (dermal, rabbit) : Not applicable  
LC50 (inhalation, rat) : Not applicable  
Irritation to eyes (rabbit) : Slightly Irritating  
Skin corrosion / irritation (rabbit) : No data available  
Ignition : No hazards anticipated if material has not exchanged hazardous substances.  
No evidence of carcinogenic effects.  
No evidence of teratogenic effects.  
No evidence of mutagenic effects.

### Carcinogenicity

### Teratogenicity

### Mutagenicity

## SECTION 12: Ecological information

### Ecotoxicity

Information not available.

### Mobility

Virtually insoluble in water.  
The product is not volatile.

### Persistence and biodegradability

The product is not readily biodegradable

### Risk of bioaccumulation

None

### Other adverse effects

May change the pH of receiving waters in case of major spillages.

## SECTION 13: Disposal considerations

The product as delivered is a non-hazardous waste.

The used product may be subject to different classifications. In any case the product shall be disposed off, according to local, regional and national regulations.

EU number for exhausted or saturated ion exchange resins used for the preparation of drinking water or water for industrial use is 19 09 05.

EU number for exhausted or saturated ion exchange resins used in waste water treatment plants not otherwise specialized is 19 08 06.

## SECTION 14: Transport information

Ion exchange resins as supplied are not classified as hazardous for transport.

Classification for ROAD and RAIL transport : Not regulated  
(Not dangerous for transport)

Classification for SEA transport : Not regulated  
(Not dangerous for transport)

Classification for AIR transport : Not regulated  
(Not dangerous for transport)

## **SECTION 15: Regulatory information**

### **Risk phrases**

The product as supplied is non hazardous.

R 36 : Irritating to eyes.

S 26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S39 : Wear eye/face protection

## **SECTION 16: Other information**

### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.cdhfinechemical.com](http://www.cdhfinechemical.com) for additional terms and conditions of sale.