

## IR100FD strongly acidicstyrene cation exchange resin

### 1. Product characteristic

This product is styrene and divinyl benzene cross linked copolymer molecule with sulfonic acid groupion exchange resin. It's acidity is equal to sulfuric acid and hydrochloric acid's. It has the features of high strength and high exchange capacity.

### 2. Carried standard

GB13659-92 DL519-93 SH2605.01-1997 Q/JH105-2002

### 3. Physical and chemical property

Item	IR100 FD NA+ FORM
Mass total exchange capacity mmol/g(dry)	≥4.50
Volume total exchange capacity (mmol/ml)	≥1.90
Moisture content %	45-53
Wet apparent density (g/ml)	0.77-0.87
Wet true density (g/ml)	1.25-1.29
Effective grain size(mm)	0.40-0.70
Uniform coefficient	≤1.60
Particle size(%)	(0.315-1.250mm) ≥95.0
	(<0.315mm) ≤1
Sphericity after attrition(%)	≥90

Leave factory form:Na+

Appearance: gold yellow to tan sphericity particles

#### **4. Operation reference index**

- 1) PH range: 1-14
- 2) Maximum service temperature: Hydro-gan type $\leq 100^{\circ}\text{C}$ , Na type $\leq 120^{\circ}\text{C}$ ,
- 3) Na-H: ( $\text{Na}^+ \rightarrow \text{H}^+$ ) 8-10%
- 4) Industrial resin layer height:  $>1.5\text{m}$
- 5) Regeneration liquid concentration: NaCl:8-10%, HCl:4-5%
- 6) Regeneration liquid dosage: NaCl (8-10%) volume: resin volume=1.5-2:1  
HCl(4-5%)volum: resin volume=2-3:1
- 7) Regeneration liquid flow rate: 5-8 m/h
- 8) Regeneration contact time: 45-60 min
- 9) Washing flow rate: 10-20 m/h
- 10) Washing time: around 30 min
- 11) Working flow rate: 15-30 m/h
- 12) Working exchange capacity:  $\geq 1000\text{mol/m}^3$

#### **5. Application**

It is mainly used for food grade or industrial grade water softening, pure water preparation, hydrometallurgy, rare metal separation, antibiotics, etc.

#### **6. Package and storage**

This product is packaged by woven bag lined with plastic sheets. 25L per bag. It can also be packaged by plastic drum or other container according to customer's demand.

This product is dangerous goods. the storage temperature is  $5-40^{\circ}\text{C}$ . It is forbidden to dehydration, exposure..