

HYDROLUX[®] CNP88

Descriptions

HYDROLUX[®] CNP88 is a new macroporous type weakly acidic cation exchange resin with a structure based on an acrylic matrix. The resin shows a very high operating capacity associated to a relatively small volume change in front of monovalent ionic forms. The exchange kinetics and mechanic-osmotic resistance are very good; therefore, this product can be applied in all cases where very high performances in hardness removal from waters, sugars and organic solutions are requested, applying the resin in both hydrogen or monovalent ionic forms. Its composition complies with existing food processing rules and regulations.

Specification

Matrix	Polyacrylate + DVB (Divinyl Benzene)
Functional Group	-COOH (Carboxylic acid)
Ionic Form	H ⁺
Shipping Weight (g/L)	780 ± 5%
Specific gravity (g/ml)	1.16 approx.
Total Capacity (eq/L)	4.4 ↑
Moisture Retention (%)	48 ± 5
Effective Size (mm)	0.50
Uniformity Coefficient	≤ 1.6
Particle Size (mm)	0.425 ~ 1.180
Whole Prefect Beads (%)	95 min
Maximum Swelling	Na ⁺ / H ⁺ = 1.50 Ca ⁺ / H ⁺ = 1.10
Operating Temp	120°C max
Operating pH	4 ~ 14

Operating Data

A. Suggested operation conditions

Operation pH range : 4~14

Operation Temp. : 120°C max

Minimum Bed depth : 700mm (min)

Service Flow Rate : 50 m/hr (max.)

B. Recommended regeneration procedure

1) Backwash

Bed depth expansion 50~80% / 10 minutes (min)

2) Regeneration

Regenerant : HCl or H₂SO₄

Regenerant concentration : HCl (1~5% w/v), H₂SO₄ (1% w/w)

Regeneration level : 110% about operating capacity

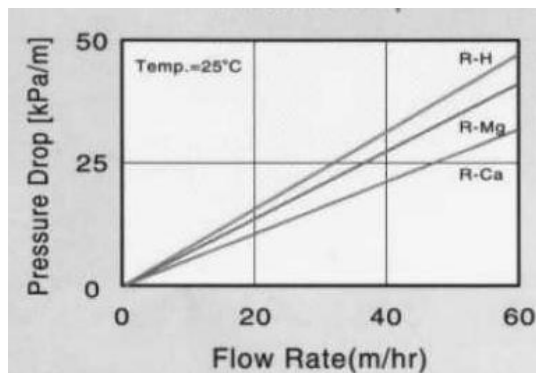


Figure 1. Pressure Drop

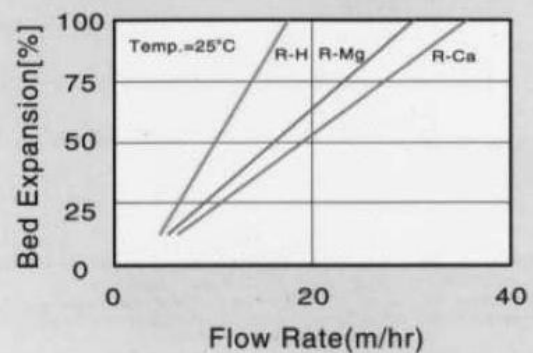


Figure 2. Bed Expansion

Handling

To protect eyes and skin of operator, protective gears such as glasses, sometimes gloves are necessary. It is recommended that eye-wash facilities are nearby at the using area. Since it is small beads type, it will be very slippery when it is spilled on the floor. Exposure to high temperature, sparks and flames should be avoided. Exposure to or mixing with oxidizing agents like nitric acid also should be avoided for the safety.

Storage

Dry, cool and dark places with ventilation are recommended. Storage container bags or drums should be tightly sealed to prevent intrusion of impurities and drying. At high temperature, degradation of capacity may occur and below freezing temperature, freezing of resin may occur. The freezing may cause physical breakage leading to low whole bead count.

Disposal

There are two ways to dispose of resins. Unused ones could be discarded by landfill or incineration following local regulations with fore-mentioned cautions. For incineration, furnace equipped with suitable safety measures is necessary because toxins such as SO_x, NO_x, CO_x could be generated. Used ones could be landfilled or incinerated as well but poisonous materials like heavy metals, if they are contained, should be removed before resins be discarded.

Packaging

25L PE Bag / 1,000L Ton bag

Hydrolux Technology Co., Ltd. *We are experts on liquid purification*

HEADQUARTERS
5F., NO.7-1, Sec. 1, Nanchang Rd., Zhongzheng
Dist., Taipei City 10074, Taiwan
TEL +886 2 23966266 FAX +886 2 23964136

FACTORY
NO.19, Ln.777, Dongping Rd., Taiping Dist.,
Taichung City 41141, Taiwan