

HYDROLUX[®] UP2294 MD

Mixed Bed Resin For High Purity Application

Descriptions

HYDROLUX[®] UP2294 MD is a semiconductor grade mixed bed resin. It is specifically designed and manufactured for use in highest purity water system.

HYDROLUX[®] UP2294 MD is a fully regenerated mixed bed of uniform particle size cation and anion exchange resin. This mixed bed product is particularly suitable for use in the polishing of highest purity water for semiconductor industry applications and similar demanding applications.

HYDROLUX[®] UP2294 MD has good kinetic performance, mechanical and chemical stability since its component resins are uniform particle size resins. Component resins are mixed to give a stoichiometric equivalent of cation and anion exchange capacity.

All the above characteristics provide customers with benefits of producing high purity water economically.

Specification

Type	Strongly Acidic Cation Gel Type	Strongly Basic Anion Gel Type
Matrix	Polystyrene + DVB (Divinyl Benzene)	
Ionic Form	H ⁺	OH ⁻
Shipping Weight (g/L)	695	
Total Capacity	1.9 eq/L ↑	1.0 eq/L ↑
Moisture Contents (%)	53 ± 5	62 ± 5
Uniformity Coefficient	≤ 1.1	≤ 1.1
Particle Size (mm)	0.63 ± 0.05	0.59 ± 0.05
Ionic Conversion%	H form	95.0 Min
	OH form	
Mixed Ratio (%)	1:1 (by equivalents) Cation : Anion	
Operating Temperature	60 °C Max	

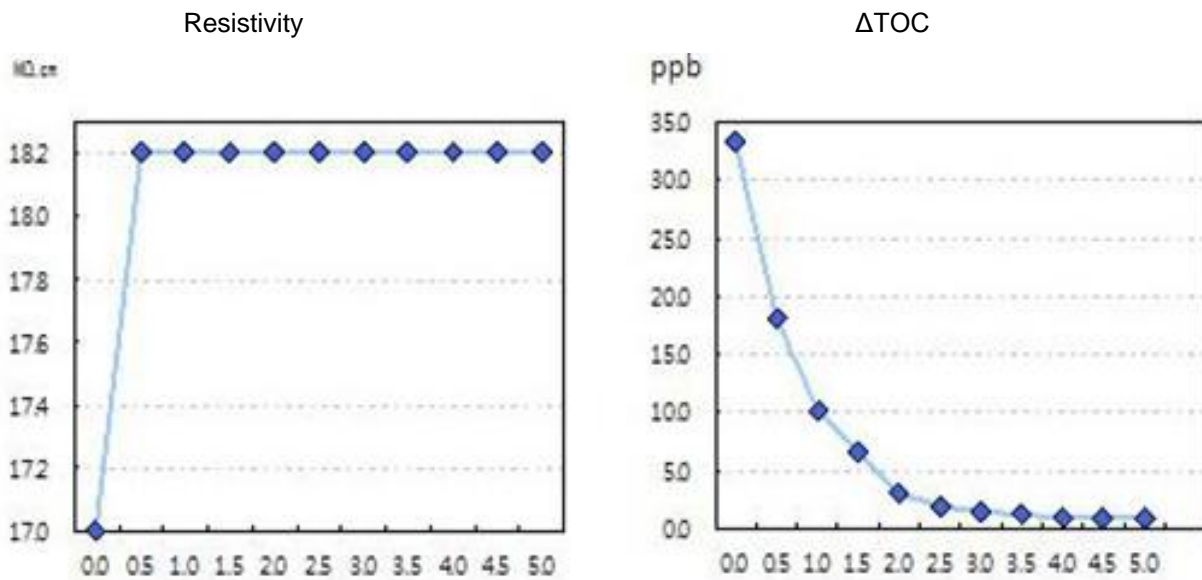
Suggested Operating Conditions

Feed water temperature	15 to 25°C
Minimum bed depth	900 mm
Service flow rate	30 to 50 BV*/h
Recommended <i>influent</i> water quality	
Inlet Resistivity	> 17.5 MΩ·cm
Inlet Silica	< 2 ppb
Inlet Total Organic Carbon	< 2 ppb

* 1 BV (Bed Volume) = 1 m³ solution per m³ resin

Resistivity and TOC Performance

- Resistivity > 18.18 MΩ·cm
- ΔTOC < 1ppb
- Feed Water : Resistivity > 17.5 MΩ·cm, TOC < 2ppb, SV = 30 BV/h



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 / 50L Drum / 1,000L Ton bag

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

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