

# Ion Exchange Resin For Polisher

- High capacity
- High stability
- Regenerable mixed bed





## DWEP Mixed Bed Ion Exchange Resin For Ultrapure Water Production

H.N.K DWEP is the electronic grade ion exchange resin which can be used as the polisher or mixed bed in the ultra-pure water system.

- High capacity
- Color and particle size difference
- Regenerable mixed bed



| Properties                | Cation H <sup>+</sup> | Anion OH -          |
|---------------------------|-----------------------|---------------------|
| Matrix                    | Styrene-DVB, gel      |                     |
| Functional Groups         | Sulfonic Acid         | Quaternary Ammonium |
| Total Exchange Capacity   | ≥1.9 eq/L             | ≥1.0 eq/L           |
| Moisture Holding Capacity | 46~51%                | 55~65%              |
| Mean Particle Size        | 650±50 μm             | 590±50 μm           |
| Shipping Weight           | 689 g/L               |                     |

### Suggested Operating Conditions

| Maximum Operating Temperature | 60°C     |
|-------------------------------|----------|
| Minimum Bed Depth             | 800 mm   |
| Service Flow Rate             | 40 BV/hr |

## Regenerant

| Cation 1-00/ 4-50 or 1-00/ 401                         | Anion 4~8% NaOH |
|--|-----------------|
| Cation 1~8% H <sub>2</sub> SO <sub>4</sub> or 4~8% HCl | AHIOH 4~0% NAOH |

#### **Characteristics**

- 1. It could have the better separation and regeneration results because of the difference of color and particle size.
- 2. Higher exchange capacity and superior volumetric ratio.

$$(H^+ Form \ge 1.9 eq/L \cdot OH^- Form \ge 1.0 eq/L)$$

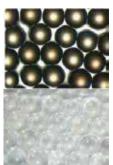
- 3. It will reduce the resin cluing.
- 4. The boron, silica ions can be effectively removed by the resin.
- 5. The resistivity and TOC expectation values can be approached by high efficiency rinsing.



## RHSP Semi-Conductor Grade Final Polishing Mixed Bed Resin

H.N.K RHSP is the semiconductor grade of polisher resin which is specially designed for the ultra-pure water quality requirement more than  $18M\Omega$ -cm. It is suitable for opto-electronics industries, assembly and testing industries, solar energy industries, and LED industries etc...

- High capacity
- Chemically balanced mixture (eq/eq)
- No clumping



| Properties                | Cation H <sup>+</sup>                 | Anion OH⁻                   |
|---------------------------|---------------------------------------|-----------------------------|
| Matrix                    | Polystyrene Divinylbenezene Copolymer |                             |
| Functional Groups         | Sulfonic Acid                         | Quaternary Ammonium         |
| Physical Form             | Dark Amber<br>Translucent Beads       | Yellow<br>Translucent Beads |
| Total Exchange Capacity   | ≥ 2.0 eq/L                            | ≥1.1 eq/L                   |
| Moisture Holding Capacity | 41~51%                                | 54~60%                      |
| Mean Particle Size        | 600~700 μm                            | 580~680 μm                  |
| Shipping Weight           | 710 g/L                               |                             |

## **Suggested Operating Conditions**

| Feed Water Temperature        | 15~25°C           | (60~77°F) |
|-------------------------------|-------------------|-----------|
| Maximum Operating Temperature | 60°C              | (140°F)   |
| Minimum Bed Depth             | 900mm             | (3 feet)  |
| Service Flow Rate             | 30 BV/hr~50 BV/hr |           |

#### **Characteristics**

- 1. Excellent Physical and Chemical Stability
- 2. Higher Exchange Capacity and Exchange Reaction Rate (H+ Form ≥ 2.0 eq/L、OH⁻ Form ≥ 1.1 eq/L )
- 3. Lower TOC and Silica Leakage
- 4. Higher Service Flow Rate (50 BV/hr)
- 5. Gel Type Uniform Particle Size

## **H.N.K Factory Overview**

With the cutting-edge technology and techniques from Japan, H.N.K resin is well-known for its superb stability as well as high capacity. A stricter standard on QC implemented by H·N·K is another plus that ensures the quality of its products.









Please contact for more information

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