

TRILITE® SPC280H

Gaussian Strong Acid Cation Exchange Resin, Macroporous

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TRILITE® SPC280H is a SAC, porous-type exchange resin with high cross-linking density, high exchange capacity, outstanding mechanical wear resistance, and chemical/physical stability. It is a highly active catalyst that can be used for a range of catalytic reactions, including esterification, etherification, alkylation, and hydration. Additionally, it can be used to produce high-purity treated water efficiently.

Physical and Chemical Properties

| | | | |
|--|---------------------|--|---------------|
| Matrix | Styrene-DVB, Porous | Functional Group | Sulfonic acid |
| Ionic Form | H ⁺ | Total Capacity(eq/ℓ) | 4.7 ↑ |
| Shipping Density(g/ℓ) | 1.75 ↑ | Moisture Retention(%) | 800 |
| Particle Density | 50~58 | Uniformity Coefficient | 1.6 ↓ |
| Particle Size (μm) | 300~1,200 | Swelling Rate(Na ⁺ →H ⁺ , %) | 8 |
| Specific surface area(m ² /g) | 40~70 | Pore Volume(ml/g) | 03~0.5 |
| Pore Size(nm) | 20~50 | Whole Beads(%) | 95 ↑ |

Recommended Operating Conditions

| | | | |
|--------------------|-----|------------------------|------|
| Operating Temp(°C) | 120 | pH Range | 0~14 |
| Bed Depth(mm) | 750 | Service Flow Rate(m/h) | 8~40 |

Applications

TRILITE® SPC280H is widely used for not only for water treatment, but also various applications including esterification (1,4BDO,MMA), Etherification (MTBE/TAME/ETBE) and other reactions (Alkylation and Hydration

Hydraulic Characteristics

Figure 1 shows the backwash expansion of TRILITE® SPC280H as a function of flow rate and temperature

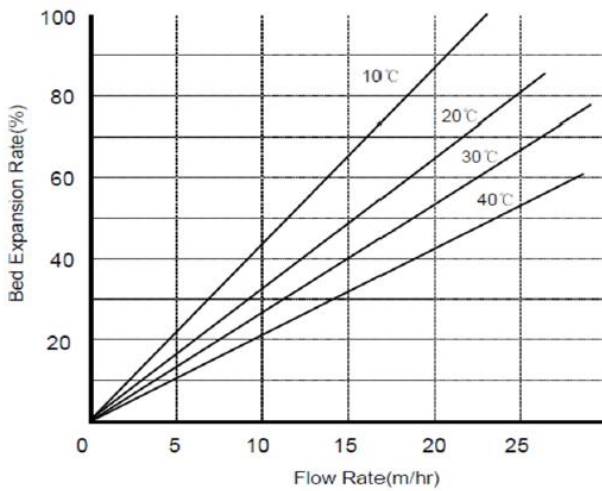


Figure 1 TRILITE® SPC280H Bed Expansion

Figure 2 shows the pressure drop of TRILITE® SPC280H as a function of flow rate and water temperature.

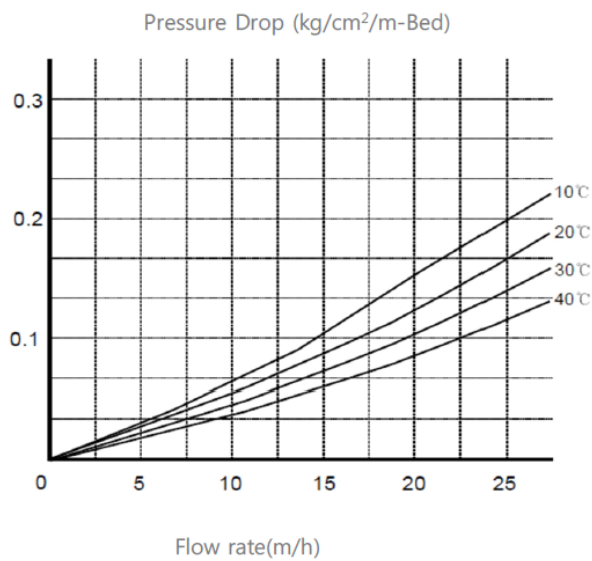


Figure 2 TRILITE® SPC280H Pressure Drop

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Samyang's TRILITE Ion exchange resins are produced based on the ISO 9001, ISO 14001 certification.
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