

**TRILITE® MC-08**

Uniform Particle Size Acid Cation Exchange Resin

Rev.3 Feb 2023

TRILITE® MC-08 is a UPS, SAC gel-type resin. Because of its excellent ion removal capacity, high purity water can be produced economically. TRILITE® MC-08 is a standard cross-linkage product and it has outstanding mechanical and chemical stability, leading to low crush rate even after long-term use. TRILITE® MC-08 can be supplied by Na<sup>+</sup> form but H<sup>+</sup> form can be available depending on application and user's request.

**Physical and Chemical Properties**

Matrix	Polystyrene+DVB, Gel	Functional Group	Sulfonic acid
Ionic Form	Na <sup>+</sup>	Total Capacity(eq/ℓ)	2.00 ↑
Shipping Density(g/ℓ)	845	Moisture Retention(%)	43~49
Particle Density	1.28	Uniformity Coefficient	1.1 ↓
Particle Size(μm)	600±50	Swelling Rate(Na <sup>+</sup> →H <sup>+</sup> , %)	9
Whole Beads(%)	95 ↑		

**Recommended Operating Conditions**

Operating Temp(°C)	120 ↓	pH Range	0~14
Bed Depth(mm)	800	Service Flow Rate(m/h)	5~60

**Regeneration**

Regenerant	HCl / H <sub>2</sub> SO <sub>4</sub> / NaCl	Concentration(%)	HCl (4~10) / H <sub>2</sub> SO <sub>4</sub> (1~4) / NaCl (8~12)
Level(g/ℓ)	50~200	Flow Rate(m/h)	2~10
Rinse Requirement(BV)	2~6		

**Applications**

TRILITE® MC-08 is used for general industrial water treatment such as water softening and demineralization, as well as lysine refining.

## Hydraulic Characteristics

Figure 1 and 2 show the backwash expansion of TRILITE® MC-08 as a function of flow rate and temperature.

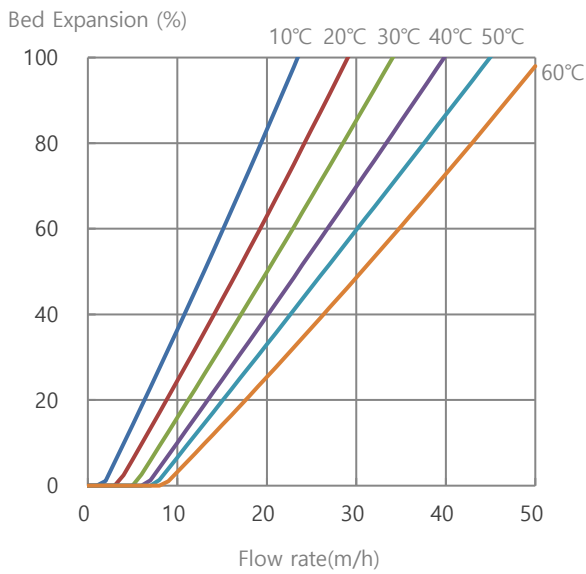


Figure 1. TRILITE® MC-08 Na<sup>+</sup> Type

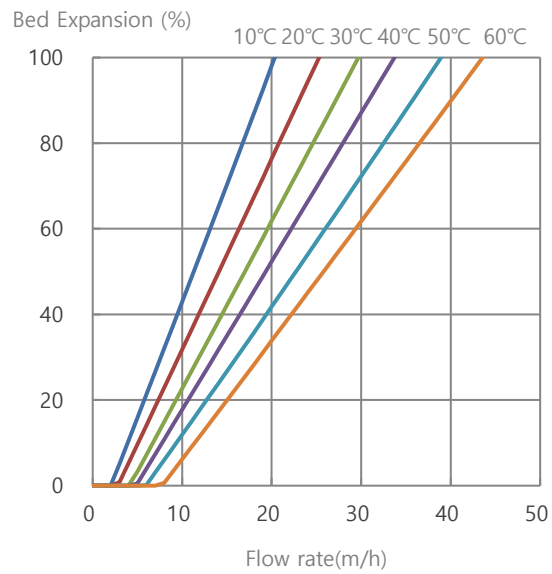


Figure 2. TRILITE® MC-08 H<sup>+</sup> Type

Figure 3 and 4 show the pressure drop of TRILITE® MC-08 as a function of flow rate and water temperature.

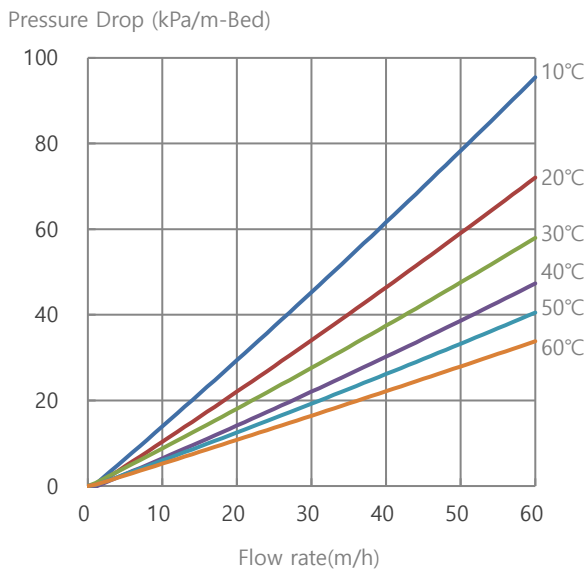


Figure 3. TRILITE® MC-08 Na<sup>+</sup> Type

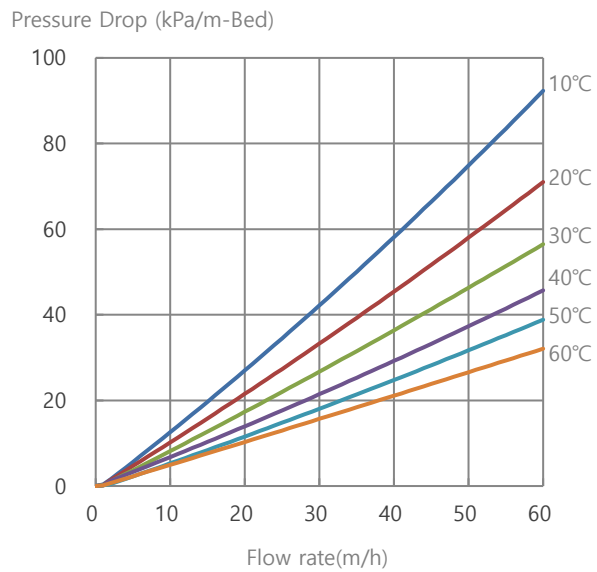


Figure 4. TRILITE® MC-08 H<sup>+</sup> Type

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