

TRILITE® UPRC100U

Uniform Particle Size Acid Cation Exchange Resin

Rev.3 Feb 2023

TRILITE® UPRC100U is a UPS, SAC gel-type exchange resin designed for ultrapure water applications with excellent ion removal capacity, allowing for the economical production of high-purity water. TRILITE® UPRC100U has outstanding physical and chemical strength, resulting in a low resin attrition rate over long-term use. It is supplied in its H+ form.

Physical and Chemical Properties

Matrix	Polystyrene+DVB, Gel	Functional Group	Sulfonic acid
Ionic Form	H ⁺	Total Capacity(eq/ℓ)	1.80 ↑
Shipping Density(g/ℓ)	800	Moisture Retention(%)	50~56
Particle Density	1.2	Uniformity Coefficient	1.1 ↓
Particle Size(μm)	620±50	Swelling Rate(Na ⁺ →H ⁺ , %)	9
Whole Beads(%)	95 ↑	Ionic Conversion (%)	H ⁺ 99 ↑

Recommended Operating Conditions

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

Applications

TRILITE® UPRC100UUPRC100U is widely used for demineralization for ultrapure water application.

Hydraulic Characteristics

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

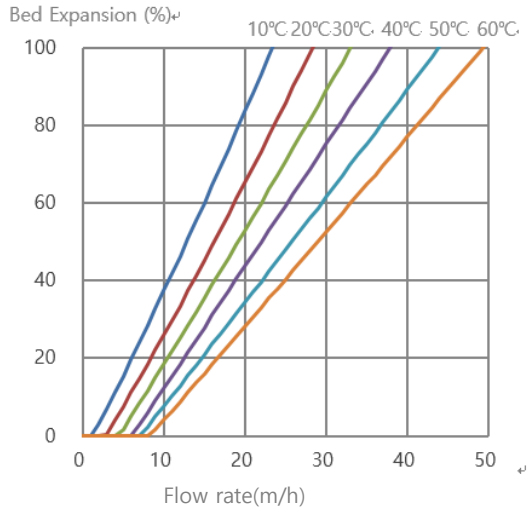


Figure 1. TRILITE® UPRC100U Bed Expansion

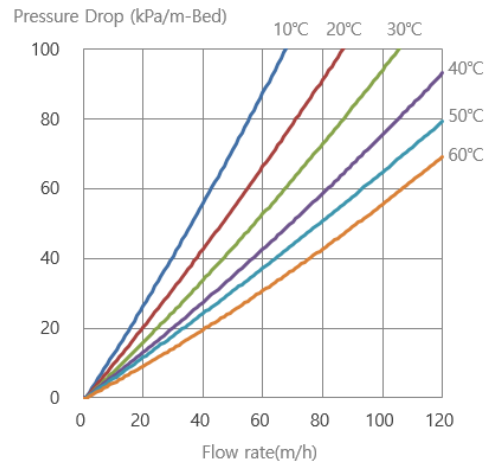


Figure 2. TRILITE® UPRC100U Pressure Drop

Resistivity Performance

Resistivity > 12.0 MΩ.cm (in 30min)

Operating Condition (Feed Water) : Resistivity > 17.5 MΩ.cm, TOC < 2ppb, SV = 30

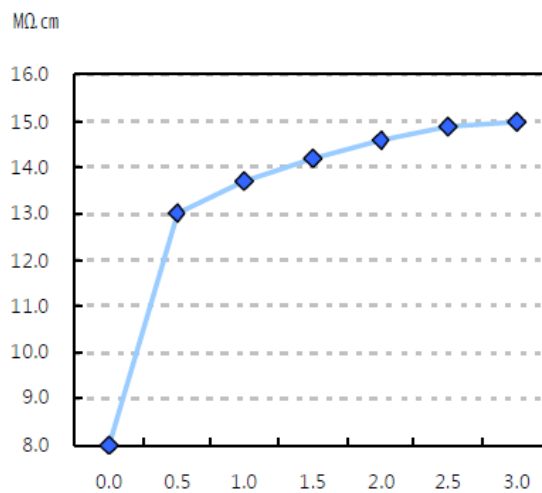


Figure 3. TRILITE® UPRC100U Resistivity

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

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