

## Product Data Sheet

## DIAION™ UBKN1U

DIAION™ UBKN1U is a cation exchange resin with a uniform particle size. It has 14% cross-linkages and excellent properties. It is recommended for higher purity water treatment application.

### Product

Grade Name	DIAION™ UBKN1U
Type	Strong Acid Cation
Matrix	Styrene-DVB, Gel
Functional Group	Sulfonic acid
Ionic Form	H <sup>+</sup>

### Specification

Whole Bead Count	-	95 min.
Salt Splitting Capacity	meq/mL	2.4 min.
Water Content	%	33 - 43
Mean Particle Size	µm	650 ± 50
Particle Size Distribution on 1180 µm	%	5 max.
Particle Size Distribution thr. 500 µm	%	2 max.
Uniformity Coefficient	-	1.2 max.
Ionic Form Conversion (H <sup>+</sup> )	eq%	99.0 min.
Ionic Form Conversion (Na <sup>+</sup> )	eq%	1.0 max.
Outlet Resistivity	MΩ·cm	12 min.
ΔTOC	ppb	50 max.

### Typical Properties

Shipping Density	g/L	810
Particle Density	g/mL	1.27
Total Swelling (Na <sup>+</sup> to H <sup>+</sup> )	%	5

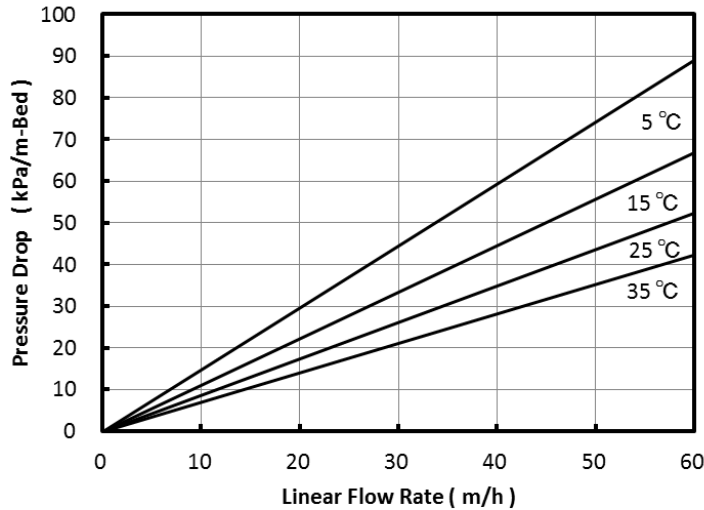


**Recommended Operating Conditions**

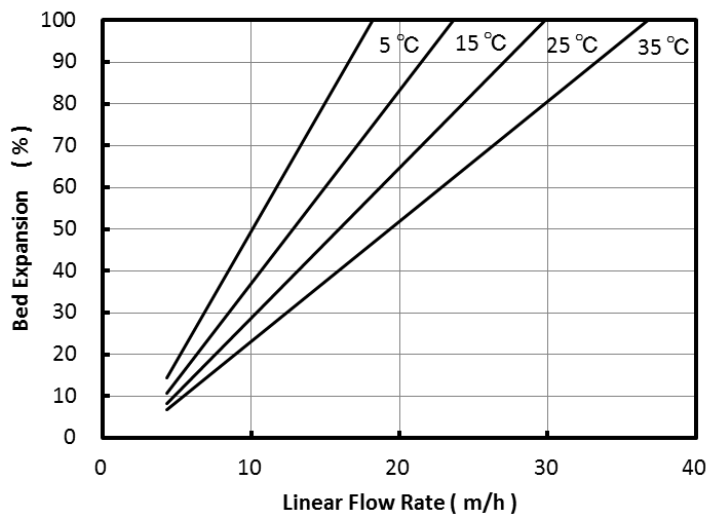
Maximum Operating Temperature	°C	120
Operating pH Range		0 - 14
Minimum Bed Depth	mm	800
Service Flow Rate	m/h	10 - 40
Regenerant		HCl
		H <sub>2</sub> SO <sub>4</sub>
Regenerant Concentration	%	HCl 4 - 10
		H <sub>2</sub> SO <sub>4</sub> 1 - 4
Regenerant Level	g/L	30 - 150
Regenerant Flow Rate	m/h	2 - 10
Total Rinse Requirement	BV	2 - 10

### Hydraulic Characteristics

The approximate pressure drop at various temperatures and flow rates for each meter of bed depth of DIAION™ UBKN1U resin in normal down flow operation is shown in the graphs below.



**Fig. 1 Pressure Drop of UBKN1U**



**Fig. 2 Bed Expansion of UBKN1U**

### Notice

This information are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. The application, use and processing of our products are beyond our control and therefore your own responsibility.