

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 ⁺	

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 ⁺)	eq%	99.0 min.
Ionic Form Conversion (Na ⁺)	eq%	1.0 max.
ΔTOC	ppb	50 max.
Outlet Resistivity	MΩ·cm	12 min.

Typical Properties

Shipping Density	g/L	810
Particle Density	g/mL	1.27
Total Swelling (Na ⁺ to H ⁺)	%	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 ₂ SO ₄
Regenerant Concentration	%	HCl 4 - 10 H ₂ SO ₄ 1 - 4
Regenerant Level	g/L	30 - 150
Regenerant Flow Rate	m/h	2 - 10
Total Rinse Requirement	BV	2 - 10

Mitsubishi Chemical Corporation

please visit <http://www.diaion.com/en>

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.

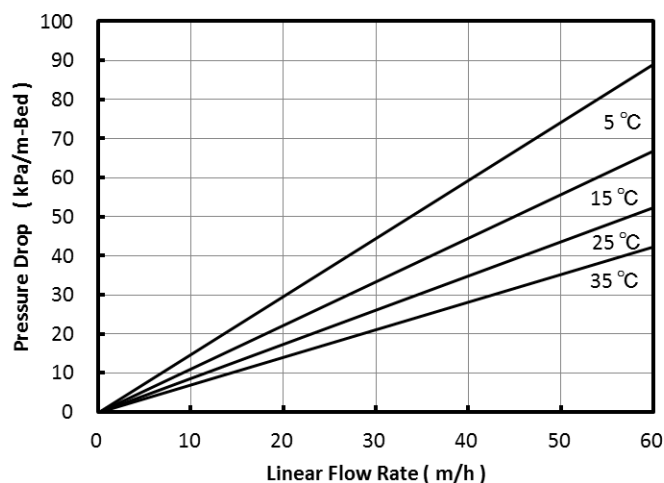


Fig. 1 Pressure Drop of UBKN1U

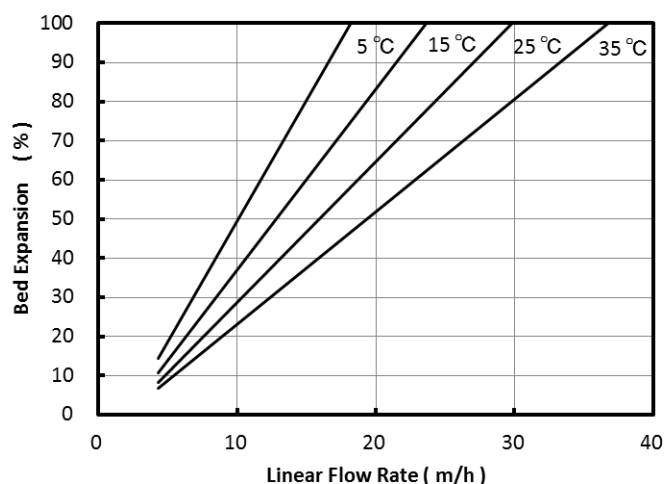


Fig. 2 Bed Expansion of UBKN1U

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