

Product Data Sheet

DIAION™ SK1B

DIAION™ SK1B is a gel type strongly acidic cation exchange resin. It has standard cross-linkages and excellent properties. A wide range of applications, especially in a field of manufacturing and processing pure water, is recommended.

Product

Grade Name	DIAION™ SK1B
Type	Strong Acid Cation
Matrix	Styrene-DVB, Gel
Functional Group	Sulfonic acid
Ionic Form	Na ⁺

Specification

Whole Bead Count	-	90 min.
Salt Splitting Capacity	meq/mL	2.0 min.
Water Content	%	43 - 50
Particle Size Distribution on 1180 μm	%	5 max.
Particle Size Distribution thr. 300 μm	%	1 max.
Effective Size	mm	0.40 min.
Uniformity Coefficient	-	1.6 max.

Typical Properties

Shipping Density	g/L	840
Mean Particle Size	μm	750
Particle Density	g/mL	1.28
Total Swelling (Na ⁺ to H ⁺)	%	9

Recommended Operating Conditions

Maximum Operating Temperature	°C	120
Operating pH Range		0 - 14
Minimum Bed Depth	mm	800
Service Flow Rate	BV/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	BV/h	2 - 10
Total Rinse Requirement	BV	2 - 10

1 BV(Bed Volume)=1 m³/m³-resin

Hydraulic Characteristics

The approximate pressure drop at various temperatures and flow rates for each meter of bed depth of DIAION™ SK1B resin in normal down flow operation is shown in the graphs below.

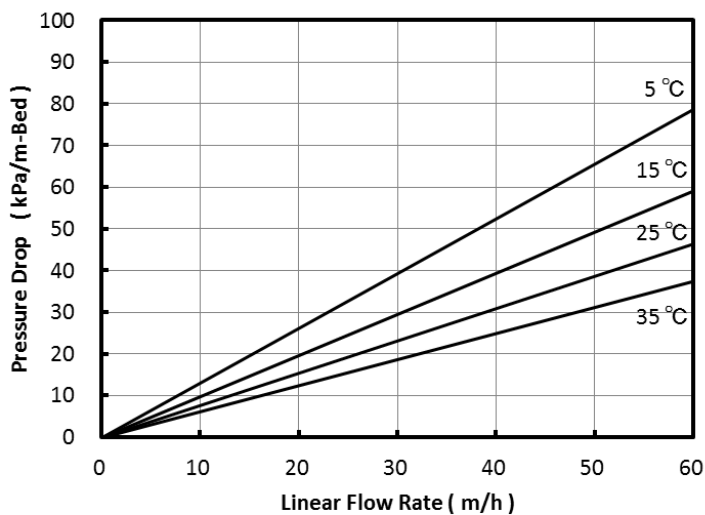


Fig. 1 Pressure Drop of SK1B

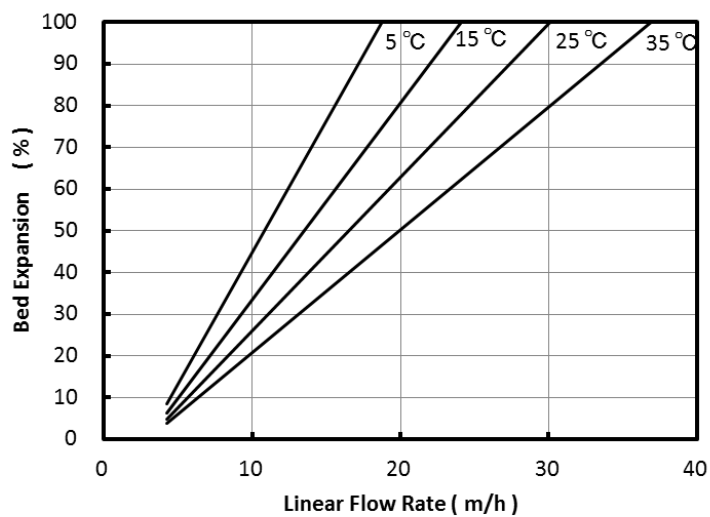


Fig. 2 Bed Expansion of SK1B

Operational Capacity Data

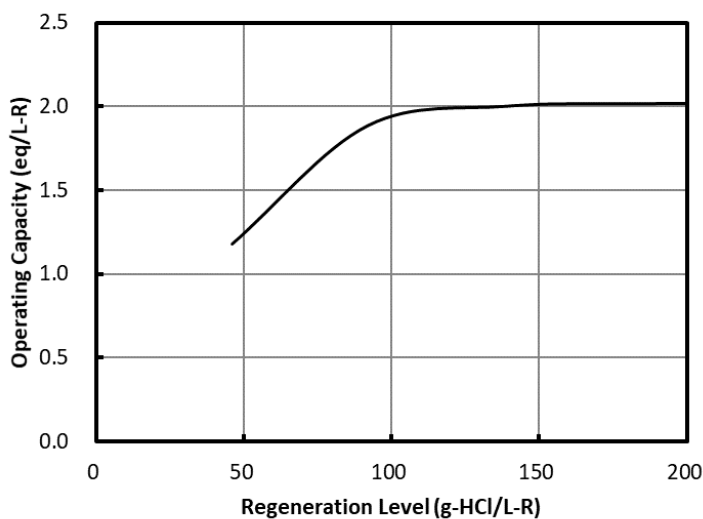


Fig. 3 Operational Capacity Data of SK1B
Regenerant : 4 % HCl

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