

## Product Data Sheet

## DIAION™ SK104H

DIAION™ SK104H is a gel type strongly acidic cation exchange resin. It has 4% cross-linkages and excellent properties. A wide range of applications, especially in a field of catalysts, is recommended.

### Product

Grade Name	DIAION™ SK104H	
Type	Strong Acid Cation	
Matrix	Styrene-DVB, Gel	
Functional Group	Sulfonic acid	
Ionic Form	H <sup>+</sup>	

### Specification

Whole Bead Count	-	90 min.
Salt Splitting Capacity	meq/mL	1.1 min.
Water Content	%	62 - 72
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.
Ionic Form Conversion (H <sup>+</sup> )	eq%	95 min.

### Typical Properties

Shipping Density	g/L	750
Mean Particle Size	μm	730
Particle Density	g/mL	1.13
Total Swelling (Na <sup>+</sup> to H <sup>+</sup> )	%	9

### Recommended Operating Conditions

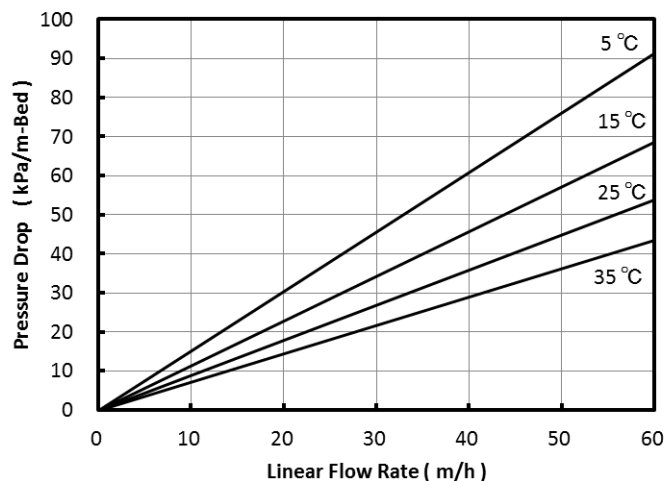
Maximum Operating Temperature	°C	120
Operating pH Range		0 - 14
Minimum Bed Depth	mm	800
Service Flow Rate	BV/h	10 - 40
Regenerant		HCl H <sub>2</sub> SO <sub>4</sub>
Regenerant Concentration	%	HCl 4 - 10 H <sub>2</sub> SO <sub>4</sub> 1 - 4
Regenerant Level	g/L	30 - 150
Regenerant Flow Rate	BV/h	2 -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

1 BV(Bed Volume)=1 m<sup>3</sup>/m<sup>3</sup>-resin

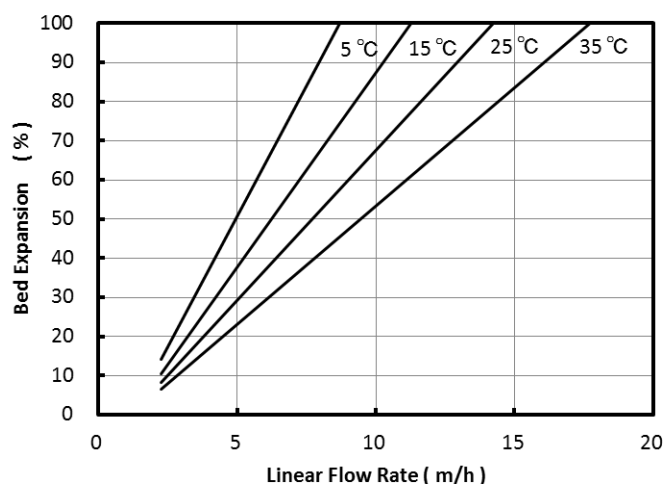


## Hydraulic Characteristics

The approximate pressure drop at various temperatures and flow rates for each meter of bed depth of DIAION™ SK104H resin in normal down flow operation is shown in the graphs below.



**Fig. 1 Pressure Drop of SK104H**



**Fig. 2 Bed Expansion of SK104H**

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