

## Product Data Sheet

**DIAION™ SKT20L**

DIAION™ SKT20L is a gel type strongly acidic cation exchange resin. It has standard cross-linkages and shows lower TOC and metal leakage. It is recommended for semiconductor UPW application.

**Product**

Grade Name	DIAION™ SKT20L
Type	Strong Acid Cation
Matrix	Styrene-DVB, Gel
Functional Group	Sulfonic acid
Ionic Form	H <sup>+</sup>

**Specification**

Color and Shape	-	Brown Translucent Beads
Salt Splitting Capacity	meq/mL	1.7 min.
Water Content	%	50 - 60
Particle Size Distribution on 1180 μm	%	5 max.
Particle Size Distribution thr. 425 μm	%	1 max.
Effective Size	mm	0.45 min.
Uniformity Coefficient	-	1.6 max.
Ionic Form Conversion (H <sup>+</sup> )	eq%	99.9 min.
Metal Content (Na)	ppb/dry-g	1000 max.
Metal Content (Ca)	ppb/dry-g	1000 max.
Metal Content (Fe)	ppb/dry-g	1000 max.
Metal Content (Zn)	ppb/dry-g	1000 max.
ΔTOC	ppb	5.0 max.
Outlet Resistivity	MΩ·cm	16 min.

**Typical Properties**

Shipping Density	g/L	790
Mean Particle Size	μm	710
Particle Density	g/mL	1.20
Total Swelling (Na <sup>+</sup> to H <sup>+</sup> )	%	9

**DIAION™ SKT20L****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™ SKT20L resin in normal down flow operation is shown in the graphs below.

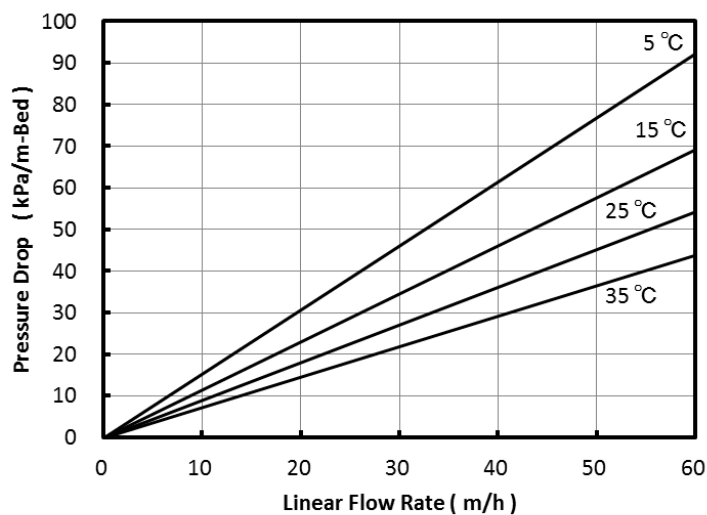


Fig. 1 Pressure Drop of SKT20L

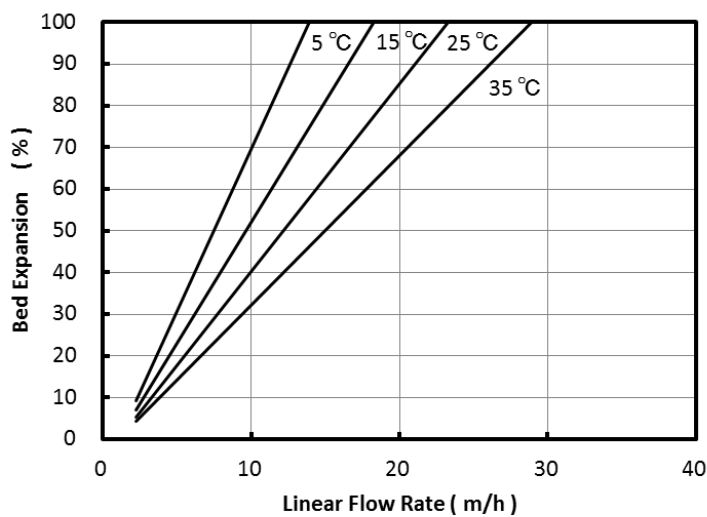
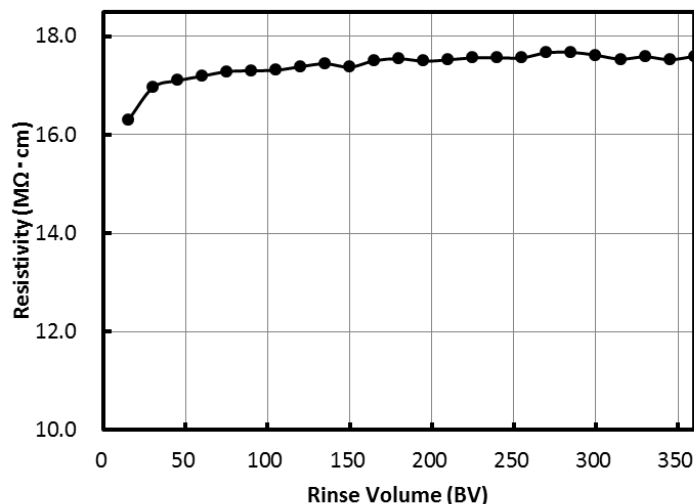
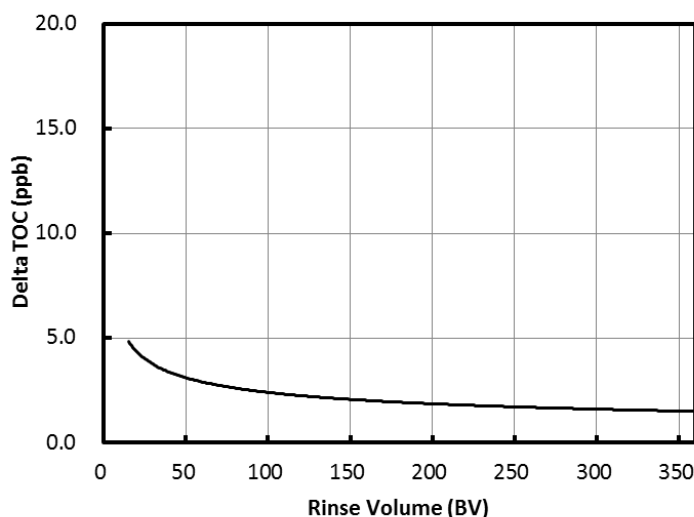


Fig. 2 Bed Expansion of SKT20L

## Rinse Performance



**Fig. 3 Resistivity versus Rinse Volume for SKT20L**  
Flow rate : SV 30 (15 L/hr), Resin volume : 500 mL-R



**Fig. 4 Delta TOC versus Rinse Volume for SKT20L**  
Flow rate : SV 30 (15 L/hr), Resin volume : 500 mL-R

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