## **Product Data Sheet**

# DIAION™ SAN1

DIAION™ SAN1 is a nuclear grade gel type strongly basic anion exchange resin. It has standard crosslinkages and excellent properties. It can be used for cleanup system in primary circuit, cleanup system of SFP, radwaste, etc.

Product		
Grade Name	DIAION <sup>TM</sup> SAN1	
Туре	Strong Base Anion	
Matrix		Styrene-DVB, Gel
Functional Group	Ту	rpe I (trimethyl ammonium groups)
Ionic Form		OH <sup>-</sup>
Specification		
Whole Bead Count	=	90 min.
Salt Splitting Capacity	meq/mL	1.0 min.
Water Content	%	57 - 67
Particle Size Distribution on 1180 μm	%	5 max.
Particle Size Distribution thr. 425 $\mu m$	%	1 max.
Particle Size Distribution 425 - 1180 $\mu m$	%	95 min.
Effective Size	mm	0.45 min.
Uniformity Coefficient	-	1.6 max.
Ionic Form Conversion OH Form	eq%	90 min.
Ionic Form Conversion CO <sub>3</sub> Form	eq%	10 max.
Ionic Form Conversion Cl Form	eq%	0.2 max.
Metal Content (Ca)	mg/L	50 max.
Metal Content (Pb)	mg/L	10 max.
Water Extractables	g/L-R	0.1 max.
Typical Properties		
Shipping Density	g/L	680
Mean Particle Size	μm	740
Particle Density	g/mL	1.07
Total Swelling (Cl to OH)	%	23



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### **Recommended Operating Conditions**

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Maximum Operating Temperature	°C	80 (CI <sup>-</sup> )
		60 (OH <sup>-</sup> )
Operating pH Range		0 - 14
Minimum Bed Depth	mm	800
Service Flow Rate	m/h	10 - 60
Regenerant		NaOH
Regenerant Concentration	%	NaOH 2 - 8
Regenerant Level	g/L	50 - 200
Regenerant Flow Rate	m/h	2 - 8
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  $\mathsf{DIAION}^\mathsf{TM}$  SAN1 resin in normal down flow operation is shown in the graphs below.

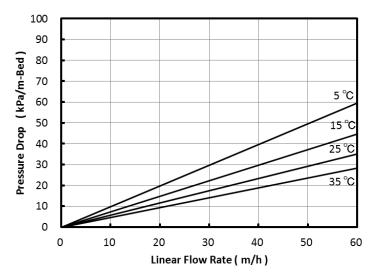


Fig. 1 Pressure Drop of SAN1

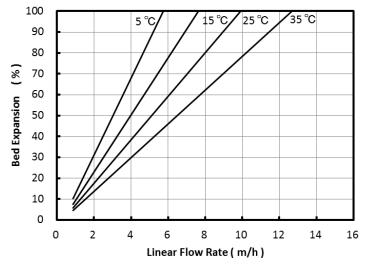


Fig. 2 Bed Expansion of SAN1

#### **Notice**

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