

## Product Data Sheet

**DIAION™ HPAN10**

DIAION™ HPAN10 is a highly porous type strongly basic anion exchange resin. It has a higher cross-linkages and higher porous properties. It is recommended for crud-removal application in nuclear power plants.

**Product**

Grade Name	DIAION™ HPAN10	
Type	Strong Base Anion	
Matrix	Styrene-DVB, Highly Porous	
Functional Group	Type I (trimethyl ammonium groups)	
Ionic Form	OH <sup>-</sup>	

**Specification**

Whole Bead Count	-	95 min.
Salt Splitting Capacity	meq/mL	0.45 min.
Water Content	%	68 - 73
Particle Size Distribution thr. 300 µm	%	1 max.
Effective Size	mm	0.30 min.
Uniformity Coefficient	-	1.6 max.
Ionic Form Conversion OH Form	eq%	85 min.
Ionic Form Conversion CO <sub>3</sub> Form	eq%	15 max.
Ionic Form Conversion Cl Form	eq%	0.2 max.
Metal Content Ca	mg/L	5 max.
Metal Content Pb	mg/L	5 max.
Metal Content Fe	mg/L	20 max.
Metal Content Cu	mg/L	5 max.
Elution Amount of TOC	mg/L	50 max.
Turbidity	ppm	100 max.

**Typical Properties**

Shipping Density	g/L	690
Mean Particle Size	µm	430
Particle Density	g/mL	1.05
Max. Resin Strength (Squash Method)	N/particle	3.6
Min. Resin Strength (Squash Method)	N/particle	0.5
Ave. Resin Strength (Squash Method)	N/particle	1.1
Total Swelling (Cl <sup>-</sup> to OH <sup>-</sup> )	%	8



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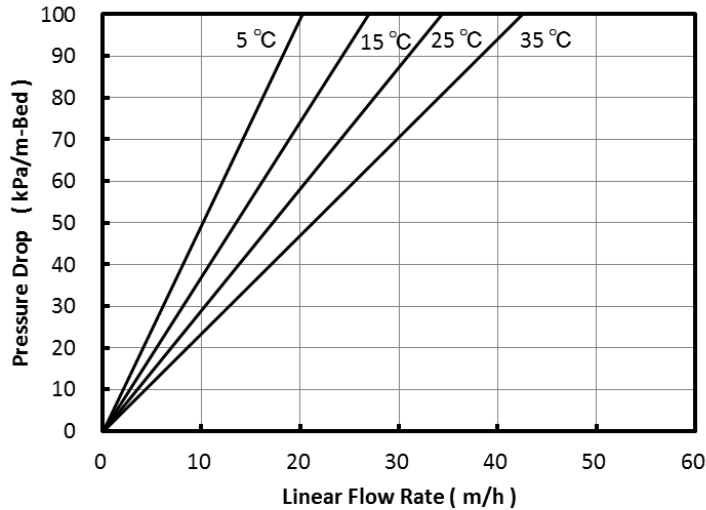
## Recommended Operating Conditions

Maximum Operating Temperature	°C	80 (Cl <sup>-</sup> ) 60 (OH <sup>-</sup> )
Operating pH Range		0 - 14
Minimum Bed Depth	mm	200
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

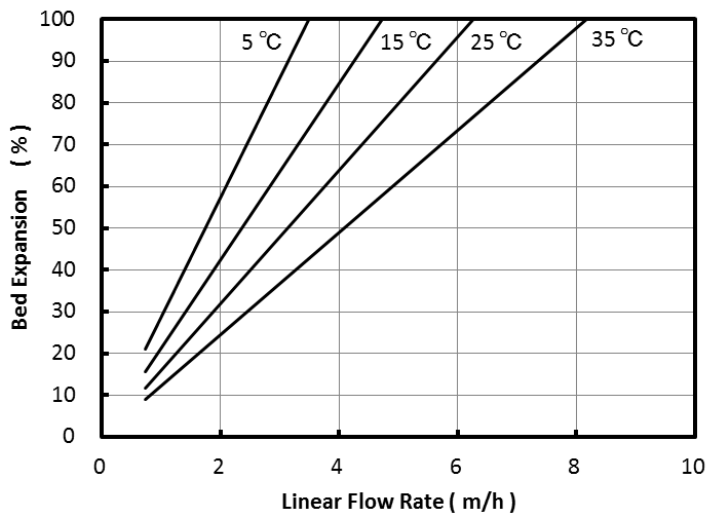


### Hydraulic Characteristics

The approximate pressure drop at various temperatures and flow rates for each meter of bed depth of DIAION™ HPAN10 resin in normal down flow operation is shown in the graphs below.



**Fig. 1 Pressure Drop of HPAN10**



**Fig. 2 Bed Expansion of HPAN10**

### Notice

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