

Product Data Sheet

DIAION™ HPA512L

DIAION™ HPA512L is a highly porous type strongly basic anion exchange resin. It has a higher cross-linkages and higher porous properties. A wide range of applications, especially in a field of enzyme purification as enzyme carriers and industrial separation of large molecules, is recommended.

Product

Grade Name	DIAION™ HPA512L	
Type	Strong Base Anion	
Matrix	Styrene-DVB, Highly Porous	
Functional Group	Type I (trimethyl ammonium groups)	
Ionic Form	Cl ⁻	

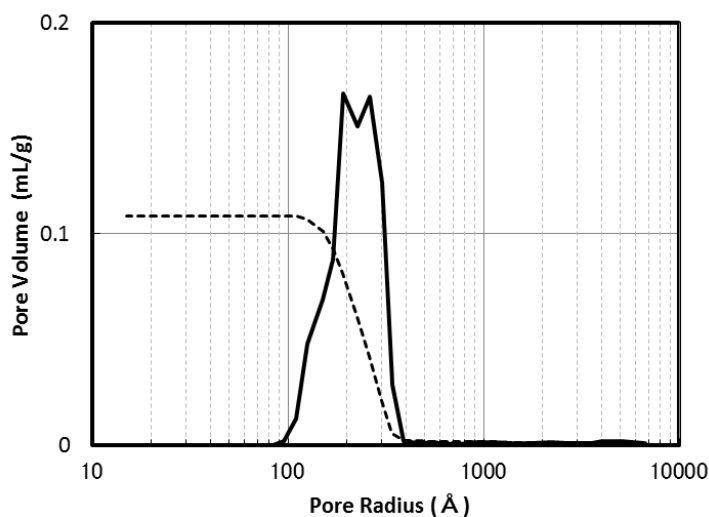
Specification

Whole Bead Count	-	95 min.
Salt Splitting Capacity	meq/mL	0.7 min.
Water Content	%	63 - 73
Particle Size Distribution on 1180 μm	%	5 max.
Particle Size Distribution thr. 425 μm	%	5 max.
Effective Size	mm	0.45 min.
Uniformity Coefficient	-	1.6 max.

Typical Properties

Shipping Density	g/L	670
Mean Particle Size	μm	680
Particle Density	g/mL	1.05
Total Swelling (Cl ⁻ to OH ⁻)	%	27
Specific Surface Area*	m ² /g	9
Pore Volume*	mL/g	0.11
Pore Radius*	Å	191

Note : properties with a mark "*" are referential data.

Pore size distribution**Fig. 1 Pore size distribution of HPA512L****Recommended Operating Conditions**

Maximum Operating Temperature	°C	80 (Cl) 60 (OH)
Operating pH Range		0 - 14
Minimum Bed Depth	mm	800
Service Flow Rate	BV/h	10 - 60
Regenerant		NaOH
Regenerant Concentration	%	NaOH 2 - 8
Regenerant Level	g/L	50 - 200
Regenerant Flow Rate	BV/h	2 - 8
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™ HPA512L resin in normal down flow operation is shown in the graphs below.

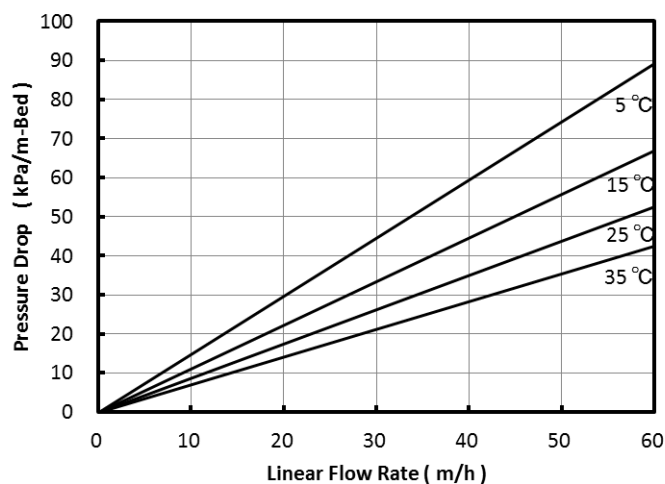


Fig. 2 Pressure Drop of HPA512L

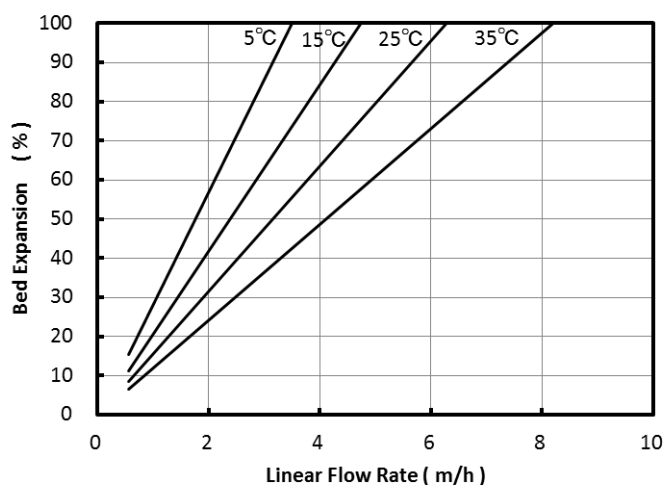


Fig. 3 Bed Expansion of HPA512L

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