

Product Data Sheet

DIAION™ PA412

DIAION™ PA412 is a porous type strongly basic anion exchange resin. It is type II resin and has a 6% cross-linkages. A wide range of applications, especially in a field of manufacturing pure water and wastewater treatment, is recommended.

Product

Grade Name	DIAION™ PA412	
Type	Strong Base Anion	
Matrix	Styrene-DVB, Porous	
Functional Group	Type II (dimethylethanol ammonium groups)	
Ionic Form	Cl ⁻	

Specification

Whole Bead Count	-	95 min.
Salt Splitting Capacity	meq/mL	1.1 min.
Water Content	%	46 - 52
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.

Typical Properties

Shipping Density	g/L	690
Mean Particle Size	μm	630
Particle Density	g/mL	1.10
Total Swelling (Cl ⁻ to OH ⁻)	%	13

Recommended Operating Conditions

Maximum Operating Temperature	°C	60 (Cl ⁻) 40 (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™ PA412 resin in normal down flow operation is shown in the graphs below.

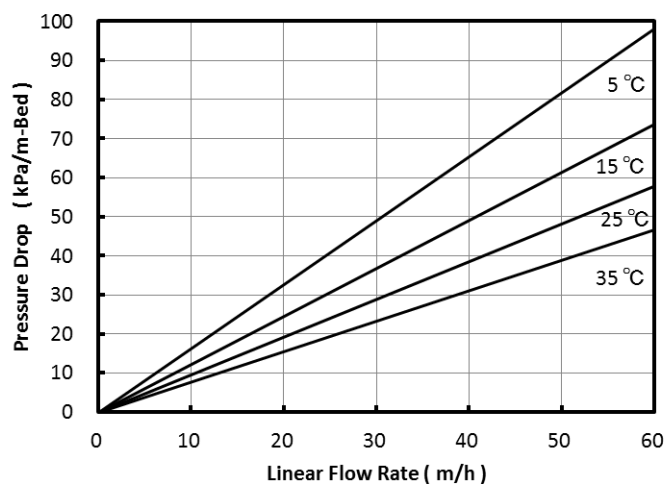


Fig. 1 Pressure Drop of PA412

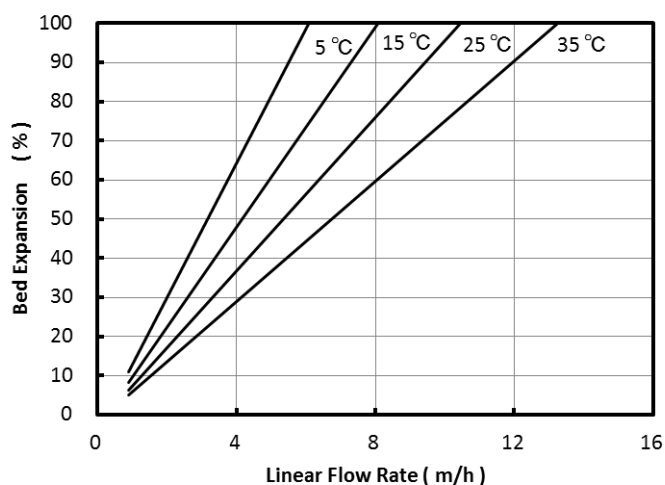


Fig. 2 Bed Expansion of PA412

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