

## Product Data Sheet

**DIAION™ WA55**

DIAION™ WA55 is a porous type weakly basic anion exchange resin. It has tertiary amine and quaternary ammonium functionality. A wide range of applications, especially in a field of demineralization of food and beverage, especially whey products, is recommended.

**Product**

Grade Name	DIAION™ WA55	
Type	Weak Base Anion	
Matrix	Styrene-DVB, Porous	
Functional Group	Tertiary / Quaternary Amine	
Ionic Form	Cl <sup>-</sup>	

**Specification**

Whole Bead Count*	-	90 min.
Water Content*	%	60 - 65
Volume Change (Cl/OH)	-	1.2 max.
Total Capacity*	meq/mL	1.1 - 1.3
Salt Splitting Capacity*	meq/mL	0.6 - 0.7
Salt Splitting Ratio*	%	50 - 60
α-LA Adsorption*	g/L-R	1.0 max.
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.

Items marked \* are measured in OH form

**Typical Properties**

Shipping Density	g/L	690
Mean Particle Size*	μm	600
Particle Density	g/mL	1.07

Items marked \* are measured in OH form

**Recommended Operating Conditions**

Maximum Operating Temperature	°C	100
Operating pH Range		0 - 9
Minimum Bed Depth	mm	800
Service Flow Rate	BV/h	10 - 40
Regenerant		NaOH
Regenerant Concentration	%	NaOH 1 - 4
Regenerant Level	% of ionic load	120
Regenerant Flow Rate	BV/h	2 - 6
Total Rinse Requirement	BV	5 - 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™ WA55 resin in normal down flow operation is shown in the graphs below.

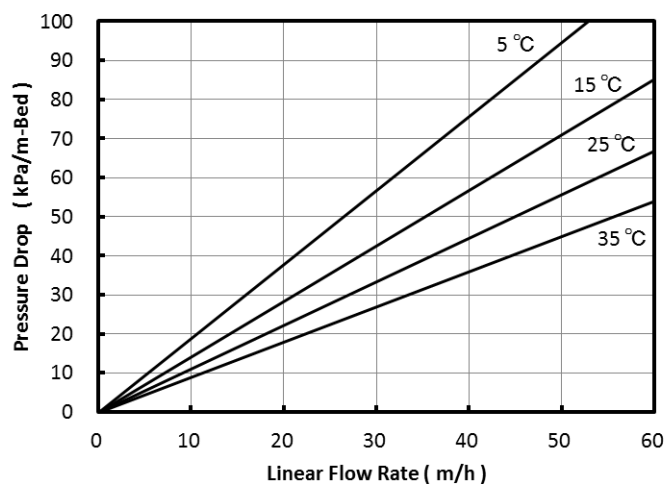


Fig. 1 Pressure Drop of WA55

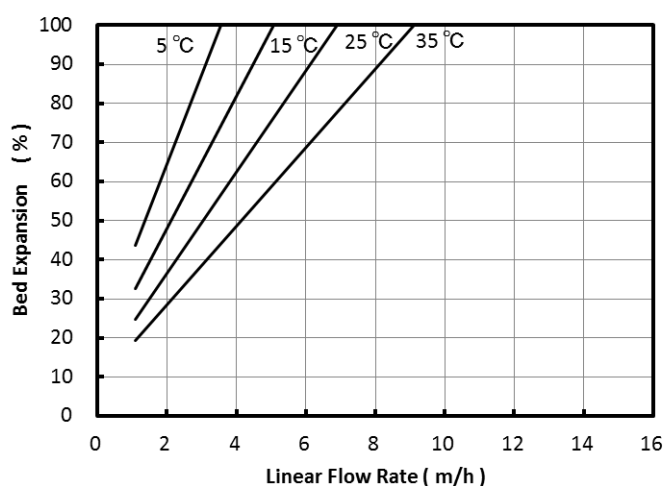


Fig. 2 Bed Expansion of WA55

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