

## Product Data Sheet

**DIAION™ WT01S**

DIAION™ WT01S is a small particle methacrylic-type weakly acidic cation exchange resin. It has carboxylic acid functionality, and has higher adsorption capacity and reaction rate. A wide range of applications, especially in a field of purification of pharmaceuticals, foods and organic chemicals, is recommended.

**Product**

Grade Name	DIAION™ WT01S	
Type	Weak Acid Cation	
Matrix	Methacrylic, Porous	
Functional Group	Carboxylic Acid	
Ionic Form	H <sup>+</sup>	

**Specification**

Whole Bead Count	-	95 min.
Total Capacity	meq/mL	3.0 min.
Water Content	%	45 - 55
Effective Size	mm	0.10 - 0.14
Uniformity Coefficient	-	1.6 max.

**Typical Properties**

Shipping Density	g/L	760
Mean Particle Size	μm	160
Particle Density	g/mL	1.14
Total Swelling (H <sup>+</sup> to Na <sup>+</sup> )	%	72

**Recommended Operating Conditions**

Maximum Operating Temperature	°C	150
Operating pH Range		5 - 14
Minimum Bed Depth	mm	800
Service Flow Rate	BV/h	5 - 40
Regenerant		HCl
Regenerant Concentration	%	HCl 1 - 5
Regenerant Level	% of ionic load	110
Regenerant Flow Rate	BV/h	2 - 6
Total Rinse Requirement	BV	10 - 20

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™ WT01S resin in normal down flow operation is shown in the graphs below.

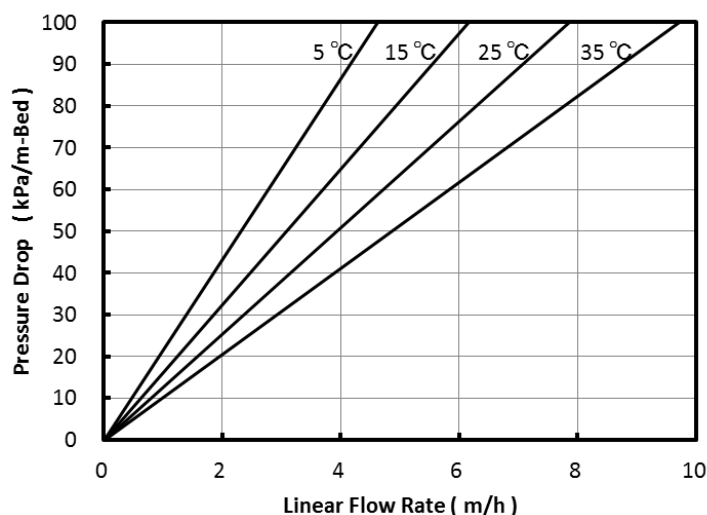


Fig. 1 Pressure Drop of WT01S

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