

Product Data Sheet

DIAION™ PK220

DIAION™ PK220 is a porous type strongly acidic cation exchange resin. It has 10% cross-linkages and excellent properties. A wide range of applications, especially in a field of manufacturing and processing pure water, is recommended.

Product

Grade Name	DIAION™ PK220	
Type	Strong Acid Cation	
Matrix	Styrene-DVB, Porous	
Functional Group	Sulfonic Acid	
Ionic Form	Na ⁺	

Specification

Whole Bead Count	-	95 min.
Salt Splitting Capacity	meq/mL	1.9 min.
Water Content	%	41 - 47
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	800
Mean Particle Size	μm	720
Particle Density	g/mL	1.29
Total Swelling (Na ⁺ to H ⁺)	%	8

Recommended Operating Conditions

Maximum Operating Temperature	°C	120
Operating pH Range		0 - 14
Minimum Bed Depth	mm	800
Service Flow Rate	m/h	10 - 60
Regenerant		HCl H ₂ SO ₄
Regenerant Concentration	%	HCl 4 - 10 H ₂ SO ₄ 1 - 4
Regenerant Level	g/L	50 - 200
Regenerant Flow Rate	m/h	2 - 10
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™ PK220 resin in normal down flow operation is shown in the graphs below.

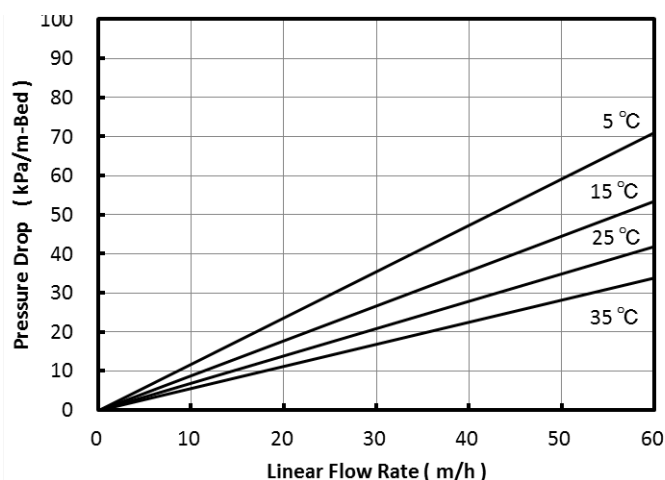


Fig. 1 Pressure Drop of PK220

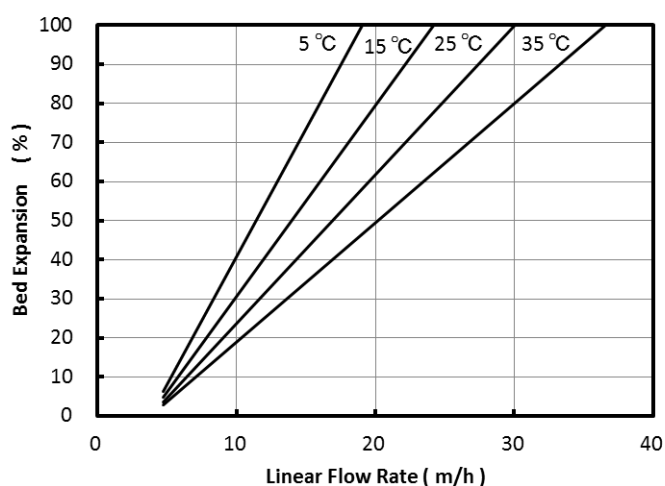


Fig. 2 Bed Expansion of PK220

Notice

DIAION™ is a registered trademark of Mitsubishi Chemical Corporation. The information contained herein is believed to be true and accurate, but all data, recommendations and suggestions are provided without guarantee, since the conditions of use are beyond our control and can affect the performance and properties of our products. The user is solely responsible for confirming that our product is suitable for the intended end use, and for compliance with all legal regulations and patents. Other than compliance with published Mitsubishi Chemical Corporation specifications agreed to pursuant to a signed writing during the warranty period, and except as required by law, MITSUBISHI CHEMICAL CORPORATION AND ITS AFFILIATES MAKE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If a product is found to be defective during the warranty period, user's sole remedy and our sole obligation is, at our option, replacement of the affected product or refund of the purchase price. Except as required by law, we are not liable for any damage, harm or loss resulting from our product, whether direct, indirect, consequential, incidental or special, and irrespective of legal theory asserted, including strict liability, contract, warranty, or negligence.

