Product Data Sheet

SEPABEADS™ FPDA13

SEPABEADS™ FPDA13 is a porous methacrylate based anion exchange resin. It shows sufficient stability and highly porous hydrophilic nature which makes it suitable for the purification of bio-polymers.

Product

Grade Name	SEPABEADS™ FPDA13
Type	Weak Base Anion
Matrix	polymethacrylate, Highly Porous
Functional Group	Tertiary Amine
Ionic Form	Free Base

Specification

Total exchange capacity	meq/mL	0.7 min.
Water content	%	53 - 63
Particle Size Distribution on 212 µm	%	5 max.
Particle Size Distribution thr. 75 µm	%	2 max.
Effective size	mm	0.1 min.
Uniformity Coefficient	-	1.6 max.

Properties

Shipping Density	g/L	720
Mean Particle Size	µm	140
Particle Density	g/mL	1.08
Specific Surface Area	m^2/g	40
Pore Volume	mL/g	1.0
Pore Radius	Å	470

Recommended Operating Conditions

Maximum Operating Temperature	°C	130
Operating pH Range		0 - 14
Minimum Bed Depth	mm	800
Flow rate	BV/h	Loading 0.5 - 5
	BV/h	Displacement 0.5 - 2
	BV/h	Regeneration 0.5 - 2
	BV/h	Rinse 1 - 5
Regenerant		Organic solvents for hydrophobic compounds
		Bases for acidic compounds
		Acids for basic compounds
		Buffer solution for pH sensitive compounds
		Water for an ionic solution
		Hot steam for volatile compounds

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Pore size distribution

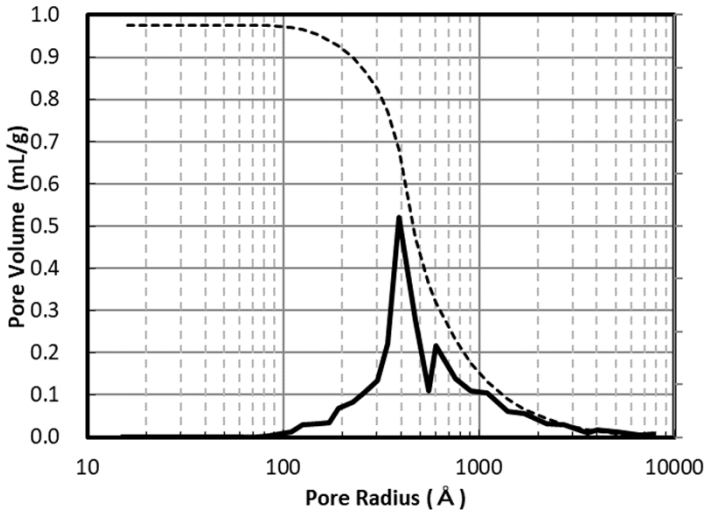

Fig. 1 Pore size distribution of FPDA13

Swelling ratio in various solvents

Methanol	1.13
Ethanol	1.09
2-Propanol	1.08
Acetone	1.10
Toluene	1.00
Acetonitrile	1.13
Water	1.00

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Hydraulic Characteristics

The approximate pressure drop at various temperatures and flow rates for each meter of bed depth of SEPABEADS™ FPDA13 resin in normal down flow operation is shown in the graph below.

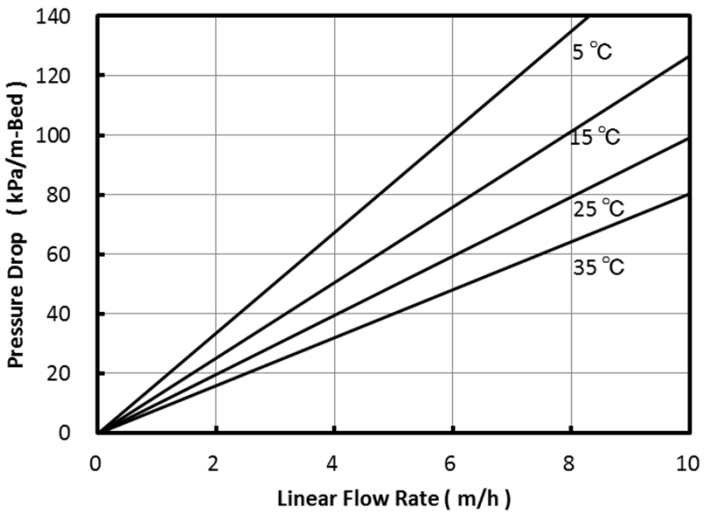

Fig. 2 Pressure Drop of FPDA13

Applications

- Purification of small peptides, oligonucleotides and proteins
- Adsorption of vitamins, antibiotics, enzymes, steroids and other substance from fermentation solutions
- Decolorization and purification of various chamicals

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