### Product Data Sheet SEPABEADS<sup>™</sup>

# SP207SS

SEPABEADS<sup>™</sup> SP207SS is a small size grade based on SEPABEADS<sup>™</sup> SP207. It has higher hydrophobicity and greater selectivity for non-polar molecules, which is derived from chemically bonded bromine to the aromatic rings, than standard aromatic adsorbents. It is applied to reversed phase chromatography.

Product		
Grade Name		SEPABEADS <sup>™</sup> SP207SS
Туре		Synthetic Adsorbents
Matrix		Modified Styrene-DVB, Pourous
Specification		
Water content	%	43 - 53
Particle Size Distrubution on 150 $\mu m$	%	15 max.
Particle Size Distribution 63 - 150 $\mu m$	%	70 min.
Particle Size Distribution thr. 63 $\mu m$	%	20 max.
Properties		
Shipping Density	g/L	790
Particle Density	g/mL	1.18
Specific Surface Area	m²/g	590
Pore Volume	mL/g	1.0
Pore Radius	Å	110
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

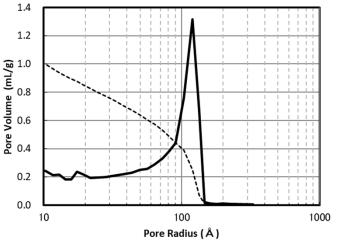


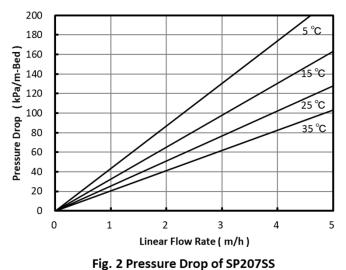
Fig. 1 Pore size distribution of SP207SS

### Swelling Ratio In Various Solvents

Methanol	1.11
Ethanol	1.17
2-Propanol	1.19
Acetone	1.20
Toluene	1.19
Acetonitrile	1.20
Water	1.00

### Hydraulic Characteristics

The approximate pressure drop at various temperatures and flow rates for each meter of bed depth of SEPABEADS<sup>TM</sup> SP207SS resin in normal down flow operation is shown in the graphs below.







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## **SP207SS**

#### Indicative Applications

Purification of small peptides, oligonucleotides and proteins
Adsorption of vitamins, antibiotics, enzymes, steroids and other substance from fermentation solutions
Decolorization of various sugar solutions
Adsorption of fatty acids
Removal of phenol
Adsorption of various perfume
Decolorization and purification of various chamicals

#### Storage condition

Synthetic adsorbents are at high risk of mold growth. Accordingly, syntheric adsorbents should be stored properly. Properly stored synthetic adsorbent resins may be stored for up to one year after production before the onset of any mold growth is detected. Optimal storage is with a 20% alcohol solution such as ethanol or isopropanol. A 10% or higher concentration of salt solution, such as NaCl, is also recommended to preserve new or used resin for storage. In case salt cannot be used, a 0.01 to 0.02 N NaOH solution may be acceptable as mold cannot withstand survival at pH higher than 12. Storage at freezing temperatures should be avoided as it may cause breakage or crush certain resin particles.

#### Notice

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