

**1. Description**

Seplife® RP LX-55SS-3 is an aliphatic polyacrylic macroporous adsorbent resin characterized by high polarity, medium-low pressure stability and high capacity. The resin has no functional groups and acts as an adsorbent with a special hydrophilic microenvironment for the biomolecule adsorption.

It is particularly suitable for reversed-phase chromatography (RPC) and adsorption. The controlled pore structure provides excellent kinetics and capacity for small biomolecules at both preparative and process scale.

**ADVANTAGES**

Polarity

Medium-low pressure stability

High chemical stability

Easy column packing

Efficient regeneration

**2. Properties**

Grade Names	LX-55SS-3 (S)	LX-55SS-3 (M)	LX-55SS-3 (L)
<b>Polymer matrix</b>	Aliphatic polyacrylic ester		
<b>Appearance</b>	White Spherical Beads		
<b>Functional Group</b>	None		
<b>Particle Size (um)</b>	30-50	50-100	100-300
<b>Uniformity Coefficient</b>	≤1.3		
<b>Bulk Density (g/mL)</b>	0.83-0.93	0.76-0.87	0.70-0.80
<b>Max pressure resistance (bar)</b>	20	15	10
<b>pH Limits, Stability</b>	1-14		
<b>Pore Volume (mL/g)</b>	1.30±0.10		
<b>Specific Surface Area (m<sup>2</sup>/g)</b>	520±50		
<b>Pore Radius (Å)</b>	250±50		
<b>Swelling coefficient (From wet in water)</b>	≤3% (100% MeOH)	≤3% (100% MeOH)	≤4% (100% MeOH)
	≤5% (100% MeCN)	≤5% (100% MeCN)	≤5% (100% MeCN)
<b>Operating Temperature (°C)</b>	10-40		
<b>Dynamic binding capacity (mg/ml)</b>	6 (Vitamin B12)		
	28 (Insulin)		
<b>Shipped as</b>	Shipped in 20% ethanol slurry for the S and M, shipped in wet form for the L grade		
<b>Expiry date</b>	5 years		

Production date: See label

**3. Hydraulic Characteristics**

The approximate pressure drop at various solutions and flow rates for Seplife® RP LX-55SS(M) in normal down flow operation is shown in the graph below.

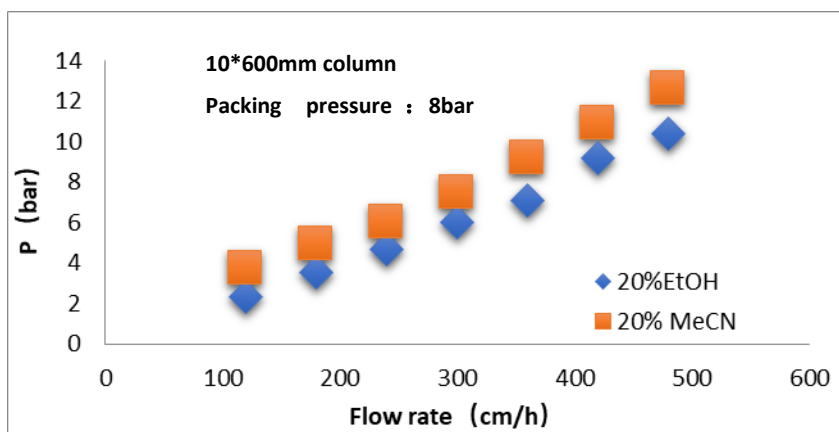
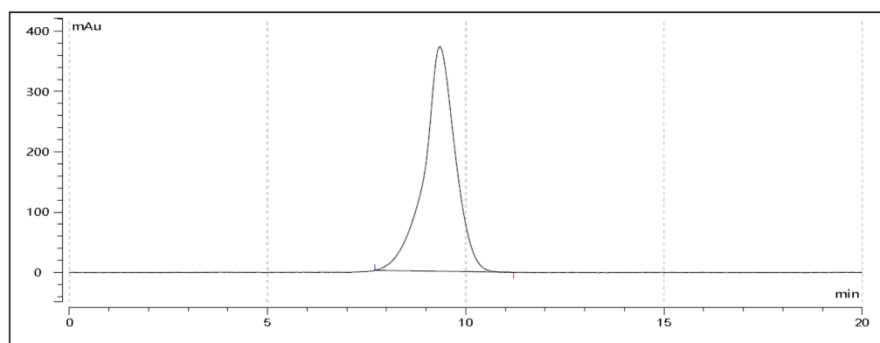


Fig 1. Pressure Drop of Seplife® RP LX-55SS-3(M)

The elution profile of Seplife® RP LX-55SS-3(M) is shown in the graph below.



10\*600mmcolumn  
 20% EtOH 4-6CV, 6cm/min;  
 Inject 1ml (0.1mlActone+0.9ml 20% EtOH)  
 UV : 280nm  
 20%EtOH, 2CV, 6cm/min

Fig 2. Elution curve for column efficiency testing of Seplife® RP LX-55SS-3(M)

#### 4. Indicative Applications

- Purification of **breviscapine B, teicoplanin, dabavacin, polymyxin, and cyclosporin**

#### 5. Shipping

Shipped in 20% ethanol slurry for the S and M grades, shipped in wet form for the L grade.

#### 6. Transportation

Avoid sunlight, rain, and heavy pressure during transportation. Do not transport in combination with toxic and hazardous materials.

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