

Analysis of Aqueous Polysaccharides

PL aquagel-OH MIXED 8 μm Columns

Advantage Statement: PL aquagel-OH MIXED 8 μm columns have a broad molecular weight resolving range, simplifying column selection and providing a flexible analytical system.

Due to the complex nature of water soluble polymers, it is often necessary to modify the eluent in order to avoid sample-to-sample and sample-to-column interactions which can result in poor aqueous SEC separations. To counteract ionic interactions, the eluent was modified in this analysis by the addition of salt. Figure 1 shows a typical raw data chromatogram for a mixture of pullulan standards. The higher molecular weight pullulans are relatively broad (polydispersity 1.2). In order to improve the separation, additional columns of the same type may be added.

Columns: 3 x PL aquagel-OH MIXED 8 μm , 300 x 7.5 mm
 Eluent: 0.2M NaNO_3 + 0.01M NaH_2PO_4 at pH 7 + 30% methanol
 Flow Rate: 1 mL/min
 Detection: RI

Peak Identification

1. 788,000
2. 212,000
3. 47,300
4. 11,800
5. 667

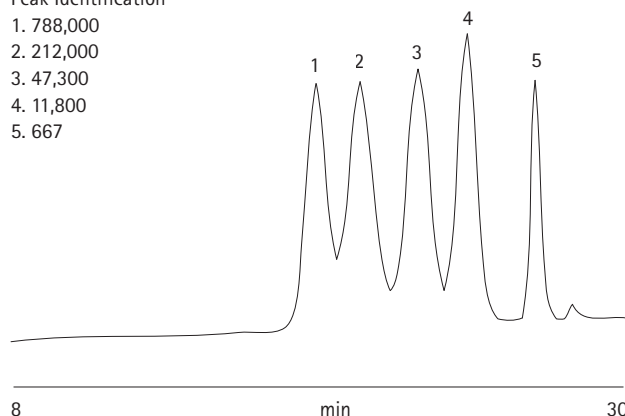


Figure 1. Raw data chromatogram for a mixture of pullulan standards.

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