TSKgel® SuperOligoPW Column

A Semi-micro Column for the High Speed and High Resolution Analysis of Aqueous Oligomers

TSKgel PRODUCT OVERVIEW

Introduction

A TSKgel® SuperOligoPW column was recently developed by Tosoh for the determination of molecular mass of aqueous oligomers, particularly oligosaccharides, and low molecular weight aqueous polymers. This semi-micro column (6.0mm ID x 15cm) is packed with spherical monodisperse polymethacrylate 3µm particles. The combination of the decreased particle size and dimensions (shorter length and narrower internal diameter) of the TSKgel SuperOligoPW column enables high speed separation combined with high resolution - half of the separation time with the same resolution compared to conventional size exclusion columns. An added benefit of the semi-micro format and small particle size is lower solvent consumption compared to conventional columns. The packing material in TSKgel SuperOligoPW columns is more hydrophilic compared with the larger particle size TSKgel G-Oligo-PW columns. In other words, an even wider range of water-soluble polymers can be eluted without the need to add organic solvent to the eluent.

Product Highlights

- 3µm particles packed in semi-micro columns: high speed, high resolution, reduced solvent consumption
- Resin is more hydrophilic: adsorption of hydrophilic polymers can be avoided

Applications

Oligosaccharides

Figure 1 demonstrates the high speed analysis of maltose oligomers using a TSKgel SuperOligoPW column compared to a TSKgel G-Oligo-PW column. The faster analysis time is due to the semi-micro dimensions (6.0mm ID x 15cm) and the small particle size (3µm) of the TSKgel SuperOligoPW column compared to the 7.8mm ID x 30cm size and 7µm particle size of the TSKgel G-Oligo-PW column.

Low Molecular Weight Compounds

The rapid analysis of hydrolysate of maltopentose using a TSKgel SuperOligoPW column is shown in *Figure 2*. The separation was completed in less than $1\!\!\!/_2$ the analysis time on the TSKgel SuperOligoPW (3µm) column compared to a TSKgel G-Oligo-PW (7µm) column.

Figure 1.

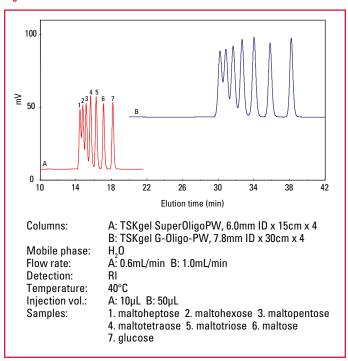
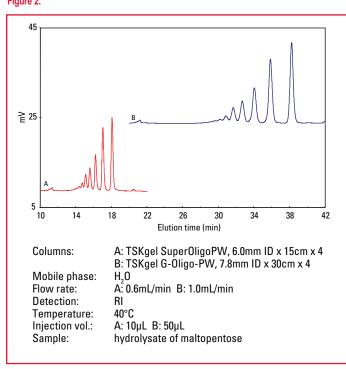


Figure 2.



Ordering Information

Part #	Description	Matrix	Housing	ID (mm)	Length (cm)
22792	TSKgel SuperOligoPW, 3µm	Polymer	Stainless Steel	6	15
22796	TSKgel SuperOligoPW Guard, 4µm	Polymer	Stainless Steel	4.6	3.5



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