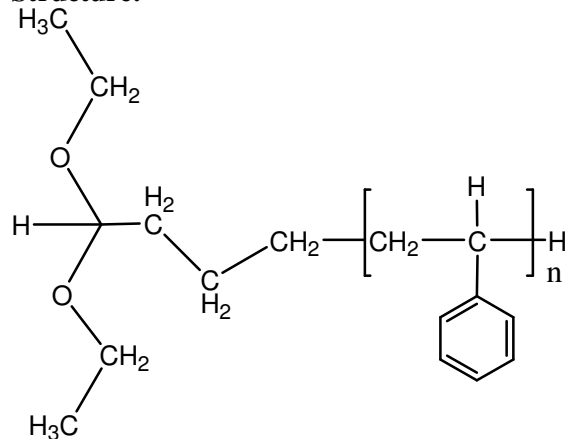


Sample Name:
Diethyl acetal Propionaldehyde Terminated Polystyrene

Sample #: **P8824- S-Acetal**

Structure:



Composition:

$M_n \times 10^3$	PDI	Functionality %
24.0	1.4	0.99

Synthesis Procedure:

Diethyl acetal Propionaldehyde Terminated Polystyrene was prepared by anionic living polymerisation.

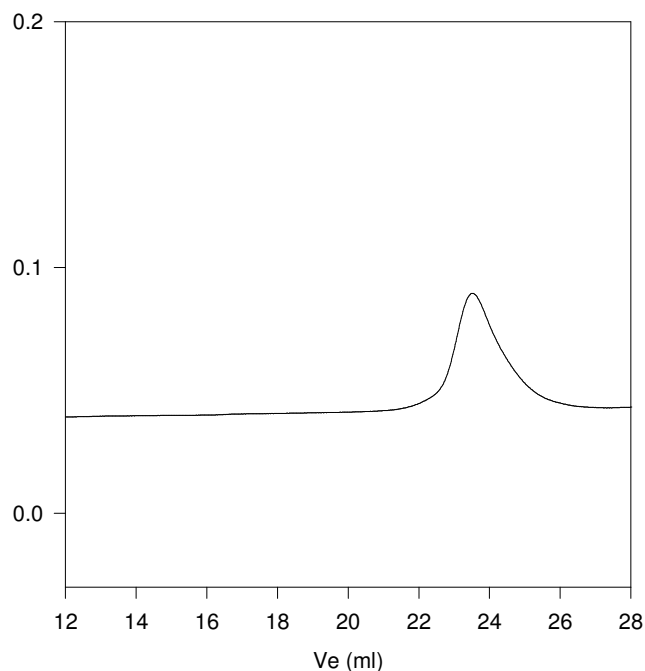
Characterization:

The molecular weight and polydispersity index of this polymer were determined before addition of the CO₂H function, by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. Polymer functionality was determined by titration with NaOH using phenolphthalein as the indicator.

Solubility: Polymer is soluble in toluene, THF, CHCl₃ and can be precipitated in water, cold methanol.

SEC elugram of the polymer:

P8824-SAcetal



Size exclusion chromatography of polymer
 — PS, $M_n=24,000$, $M_w=33,000$, $M_w/M_n=1.4$