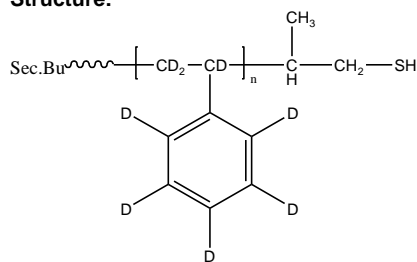


Sample Name:

ω -SH-terminated deuterated Polystyrene

Sample #: P8787-dPSSH

Structure:

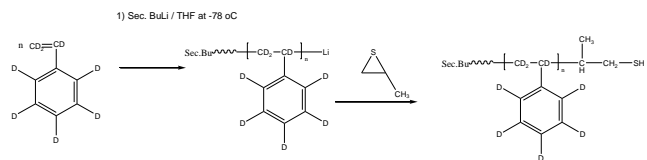


Composition:

$M_n \times 10^3$	PDI	SH end functionality
4.5	1.16	>95%

Synthesis Procedure:

ω -SH Terminated deuterated polystyrene was prepared by living anionic polymerization of deuterated styrene using a monofunctional initiator such as Sec. butyl lithium in THF at -78°C followed by termination with propylene sulfide.



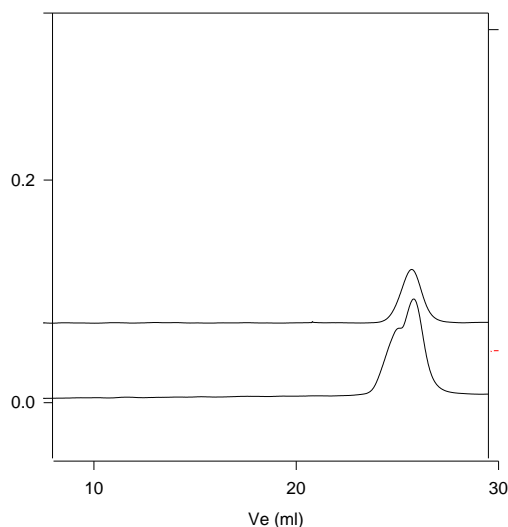
Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

Solubility: Polymer is soluble in toluene, THF, CHCl_3 and can be precipitated in water, cold methanol.

SEC of Sample:

P8787-dPSSH



Thiol terminated deuterated Polystyrene, $M_n=4500$ $M_w=5,200$ $PI=1.16$
After reducing the SEC profile still indicating about 15-20% disulfide linkage
After oxidation with iodine indicating the disulfide formation:
SH functionality over 95%