

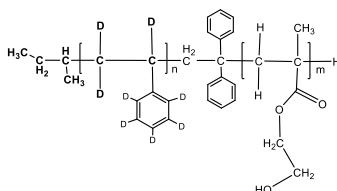
Product Profile

Identification

Product Name: Poly(deuterated styrene-d8)-b-poly(2-hydroxyethyl methacrylate)

Sample Lot#: P45750-dPSHEMA

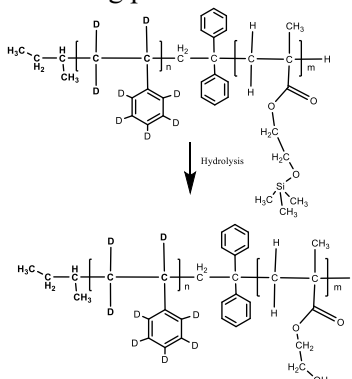
Structure:



Composition:

Mn x 10 ³	Mw/Mn (PDI)
6.0-b-6.5	1.09
Dp of each block: s ₅₄ HEMA ₅₀ from ¹ H NMR	

Method of Synthesis: By anionic Living process



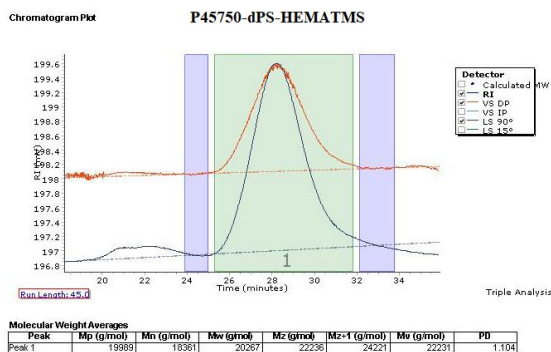
Solubility in different solvents

THF	✓	DMF	✓
CHCl ₃	×	Acetone	✓
Toluene-Hot	×		

Purification of Polymer By Soxhlet in Hexane

Validation of Architecture:

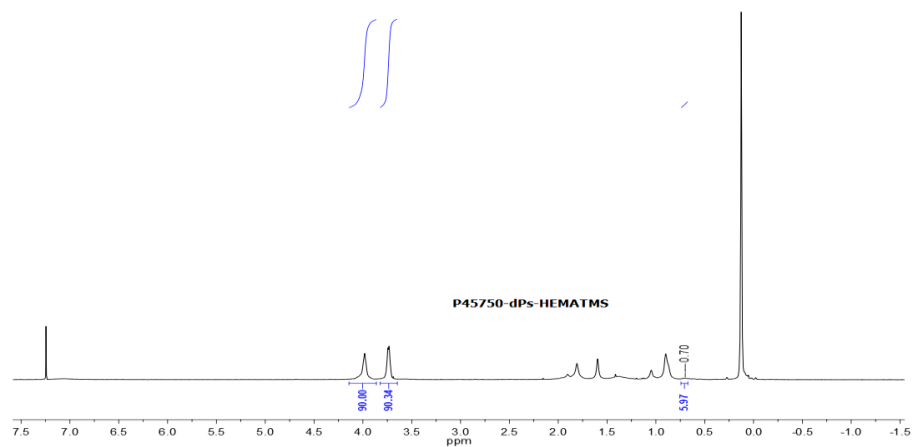
A. Gel Permeation Chromatography (GPC), SEC- Profile



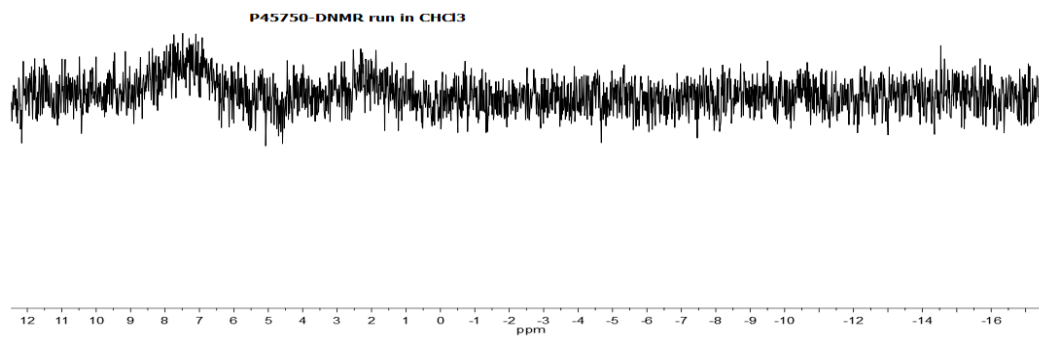
Mw/Mn by GPC and composition by HNMR

B. NMR (HNMR) of polymer:

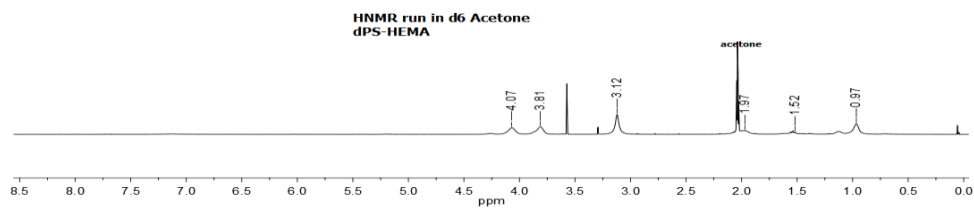
1. HNMR of Block copolymer run in CDCl_3 dPS-b-HEMATMS



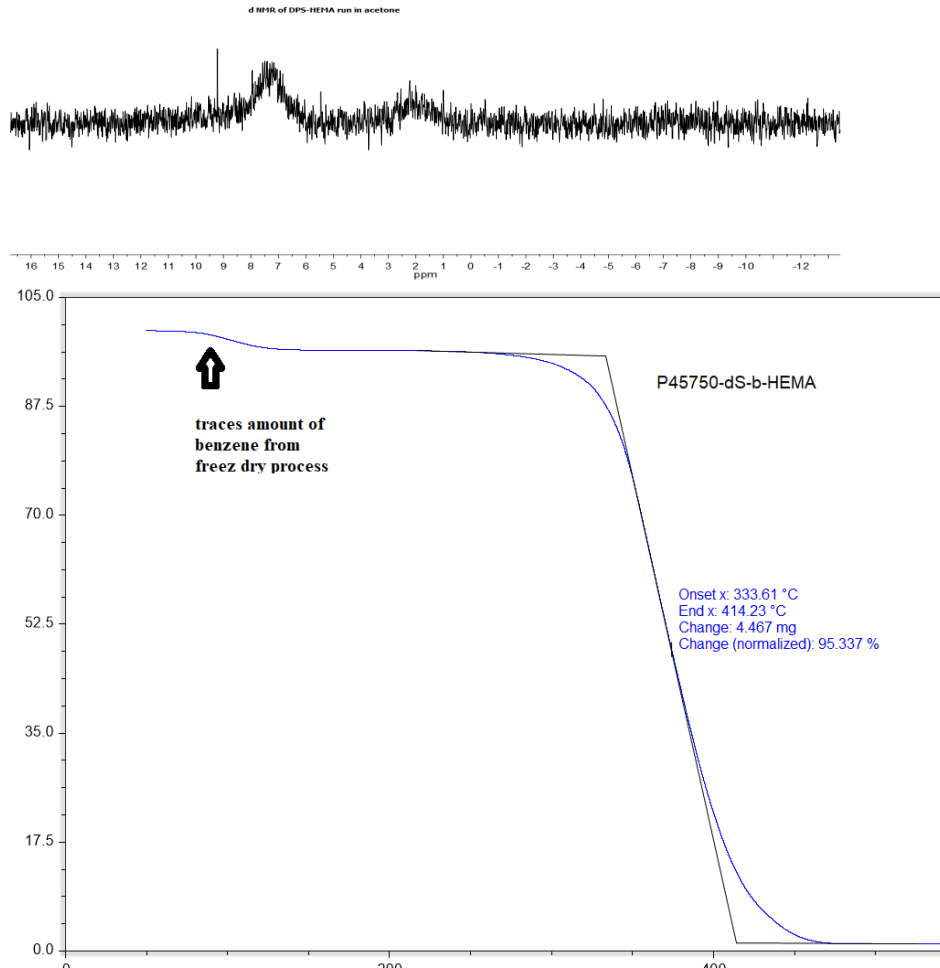
D NMR of dPS-HEMATMS run in CHCl_3



HNMR of dPS-HEMA run in $\text{d}_6\text{Acetone}$



DNMR of dPS-HEMA run in acetone



By keeping at 100 °C for 5 minutes and rerun

