

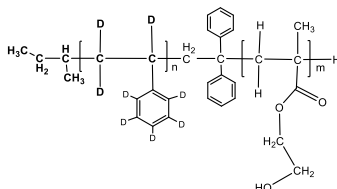
Product Profile

Identification

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

Sample Lot#: P45751-dPSHEMA

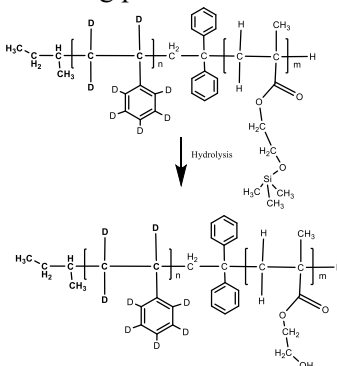
Structure:



Composition:

Mn x 10 ³	Mw/Mn (PDI)
12.0-b-10.0	1.09
Dp of each block: s ₁₀₇ HEMA ₇₈ from ¹ HNMR	

Method of Synthesis: By anionic Living process



Solubility in different solvents

THF	✓	DMF	✓
CHCl ₃	×	Acetone	✓

Purification of Polymer By Soxhlet in Hexane

Validation of Architecture:

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

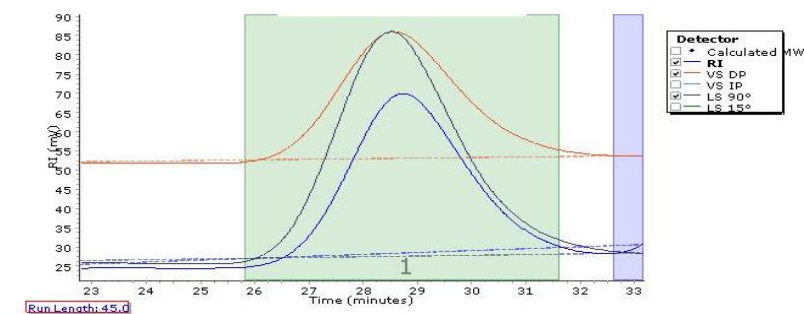
Agilent GPC/SEC Software



Agilent Technologies

Chromatogram Plot

P45751-dPS block

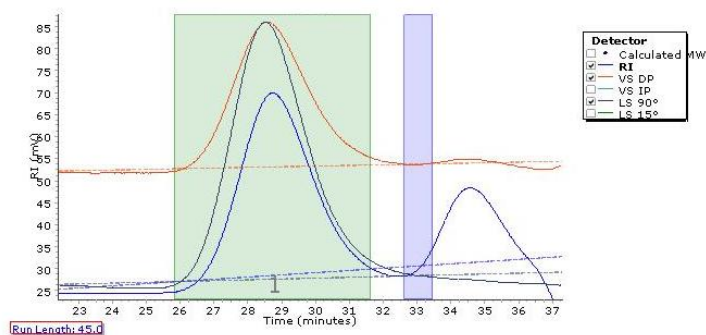


Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mu (g/mol)	PD
Peak 1	14691	11985	15122	18510	21842	18292	1.262

Chromatogram Plot

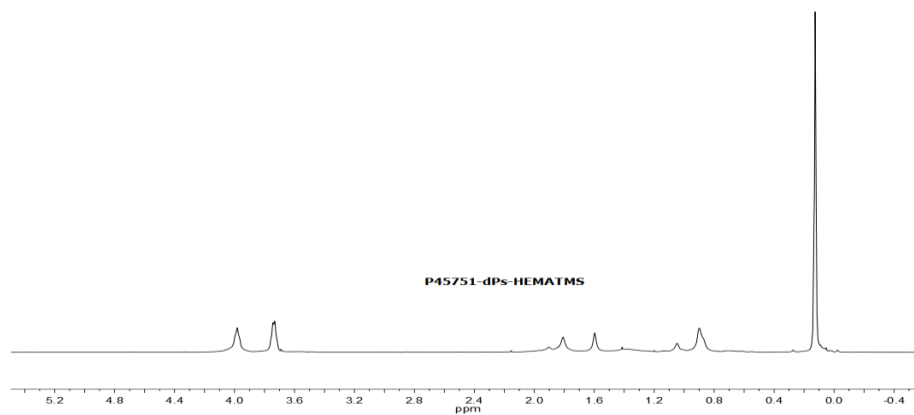
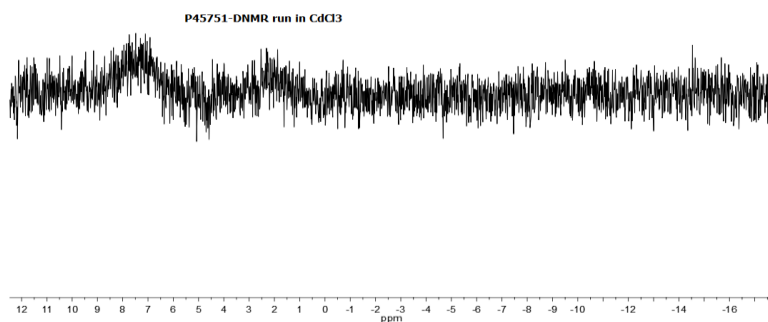
P45751-dPS-HEMA



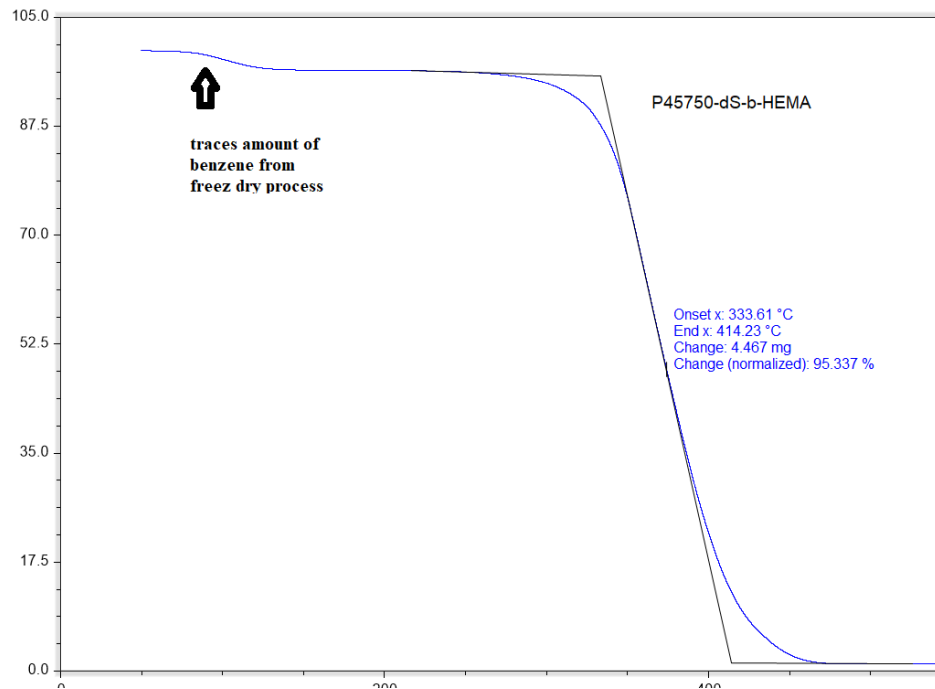
Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	24158	22332	23874	25412	26907	25310	1.069

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** 

DNMR of dPS-HEMA run in acetone



By keeping at 100 °C for 5 minutes and rerun

