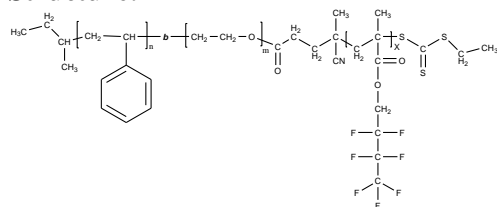


Sample Name: Poly(styrene-b-ethylene oxide-b-2,2,3,3,4,4-Heptafluorobutyl methacrylate)

Sample #: P41578-SEOHFBMA

Structure:



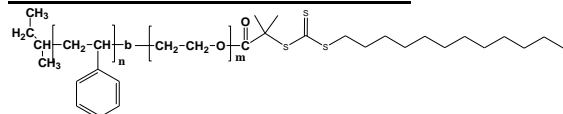
Composition:

Mn x 10 ³ S-b-EO-b-HFBMA	PDI
9.0-b-19.5-b-17.0	1.10

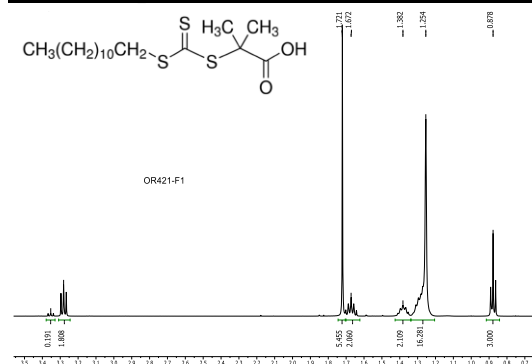
Synthesis Procedure:

The polymer was prepared by combination of anionic and RAFT polymerization process.

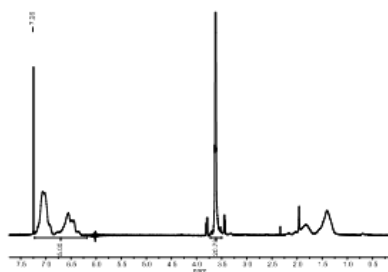
RAFT macroinitiator structure:



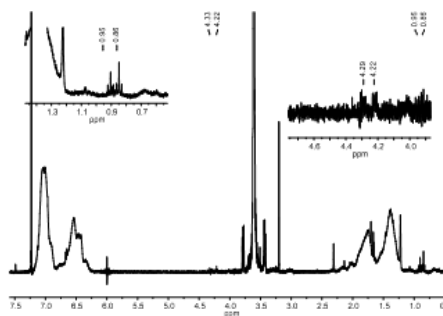
¹H NMR spectrum of the RAFT macroinitiator:



¹H NMR spectrum of the SEO Sample in CdCl3:



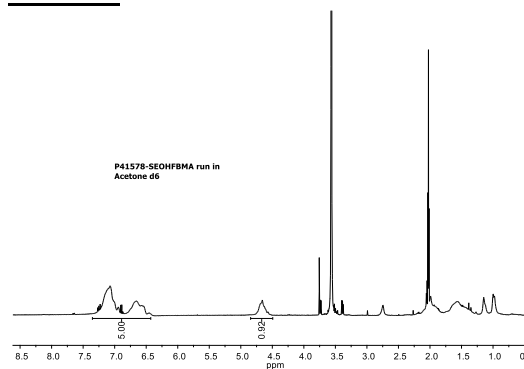
HNMR spectrum of SEO-terminated with RAFT in CdCl3:



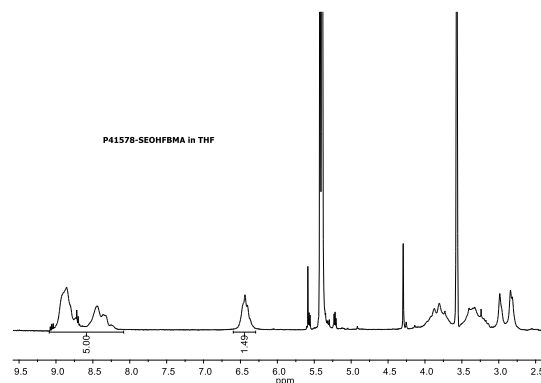
HNMR analysis of the triblock copolymer:

HNMR analysis in CdCl₃, D₆ Acetone gives ambiguity compositions of HFBMA moiety. Following are the results in CdCl₃ or acetone. THF was found the good solvent for the determination of HFBMA composition in triblock copolymer.

HNMR spectrum of the SEOHFBMA Sample in d6-Acetone:

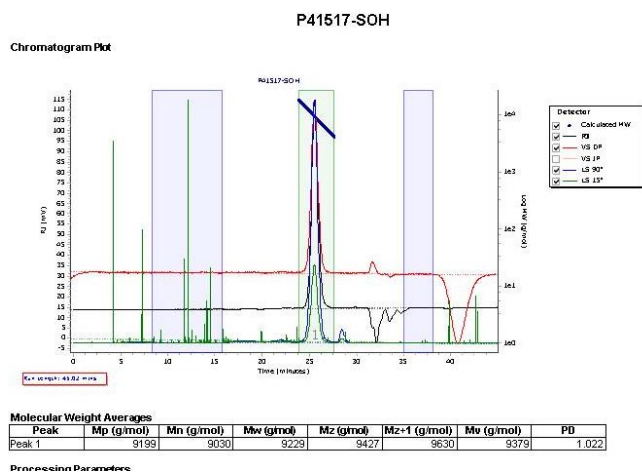


HNMR spectrum of the SEOHFBMA Sample in d8-THF



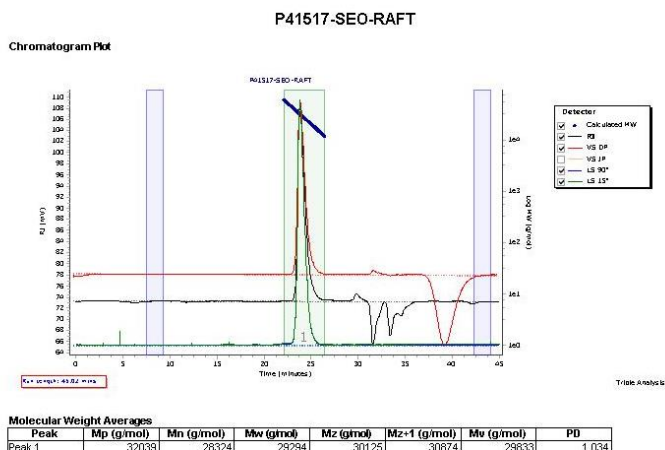
SEC elugram of the SOH Sample:

Agilent GPC/SEC Software



SEC elugram of SEO-terminated with RAFT:

Agilent GPC/SEC Software

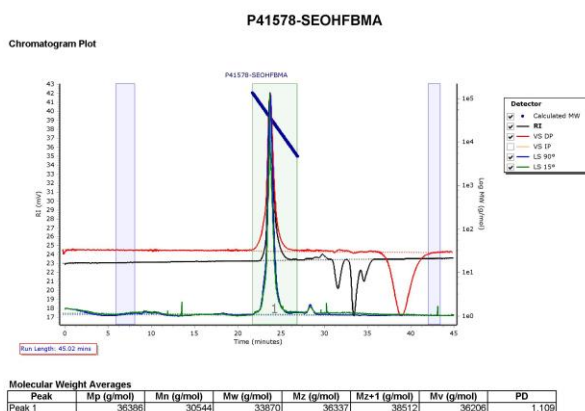


GPC of the final polymer shows elution counts retarded in comparison to SEO RAFT diblock copolymer. From GPC only molecular weight distribution calculated and compositions from its HNMR analysis.

Furthermore, Homo poly 2,2,3,3,4,4-Heptafluorobutyl methacrylate polymer shows negative dn/dc in THF.

SEC elugram of the Sample:

Agilent GPC/SEC Software



Solubility in Different solvents

CHCL3	In soluble
THF	Clear at 35 oC
Acetone	Soluble at Room temperature
DMF	In soluble