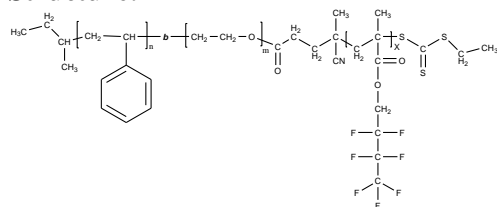


**Sample Name:** Poly(styrene-b-ethylene oxide-b-2,2,3,3,4,4-Heptafluorobutyl methacrylate)

**Sample #:** P41577-SEOHFBMA

**Structure:**



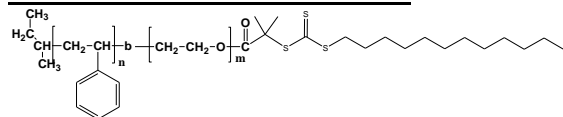
**Composition:**

Mn x 10 <sup>3</sup> S-b-EO-b-HFBMA	PDI
9.0-b-19.0-b-36.0	1.17

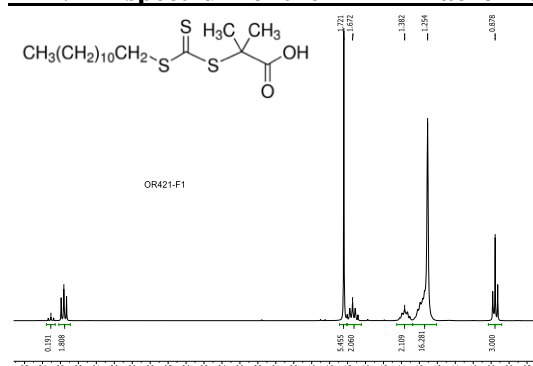
**Synthesis Procedure:**

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

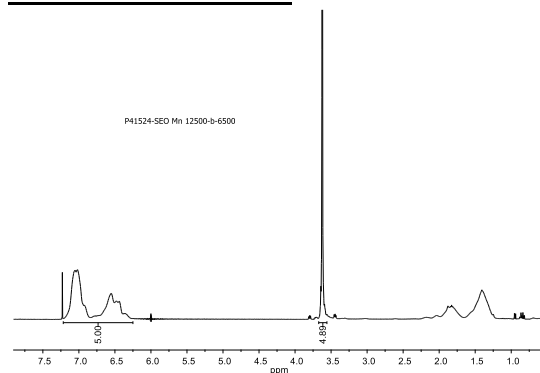
**RAFT macroinitiator structure:**



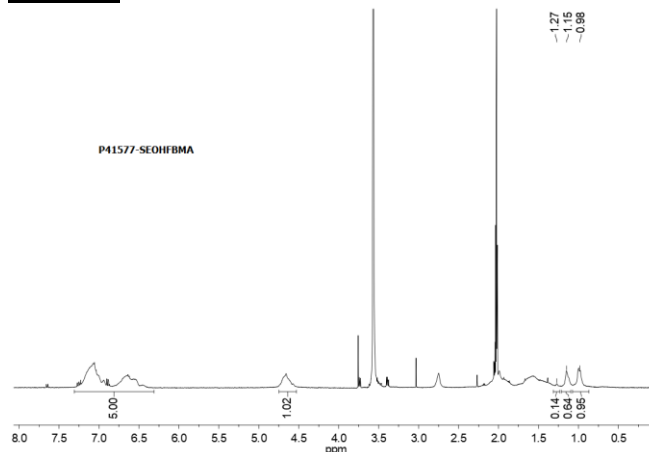
**<sup>1</sup>H NMR spectrum of the RAFT macroinitiator:**



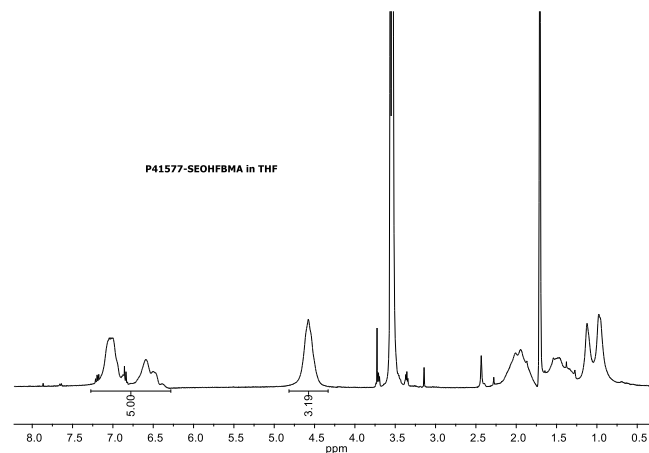
**<sup>1</sup>H NMR spectrum of the SEO Sample in CdCl<sub>3</sub>:  
LotP41524-SEORAF**



**HNMR spectrum of the SEOHFBMA Sample in d6-Acetone:**



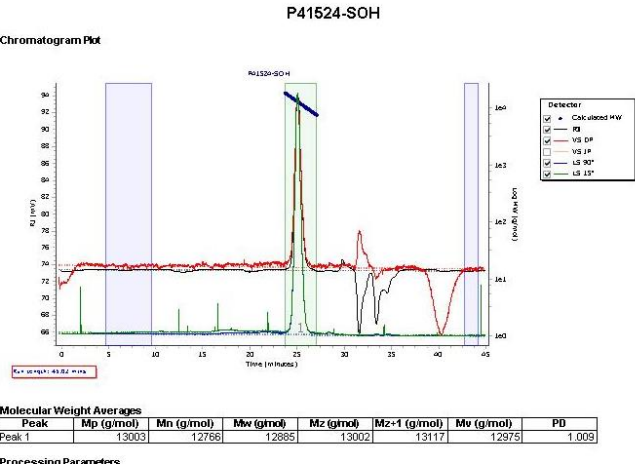
**HNMR spectrum of the SEOHFBMA Sample in d8-THF**



HNMR analysis in CdCl<sub>3</sub>, D6 Acetone gives ambiguity compositions of HFBMA moiety. Following are the results in CdCl<sub>3</sub> or acetone. THF was found the good solvent for the determination of HFBMA composition in triblock copolymer.

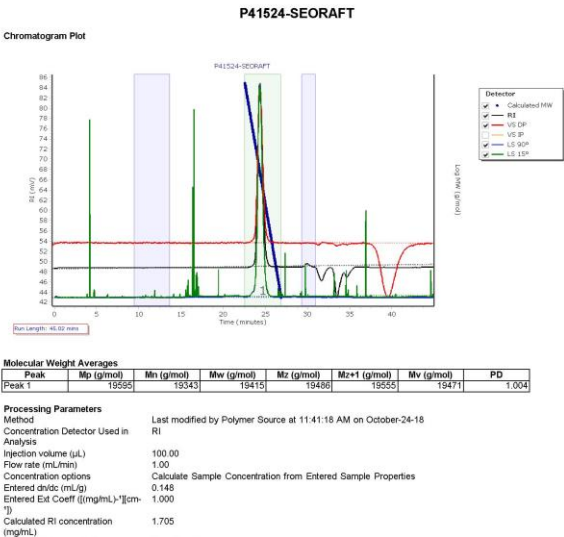
SEC elugram of the SOH Sample:

Agilent GPC/SEC Software



SEC elugram of the SEO-RAFT Sample:

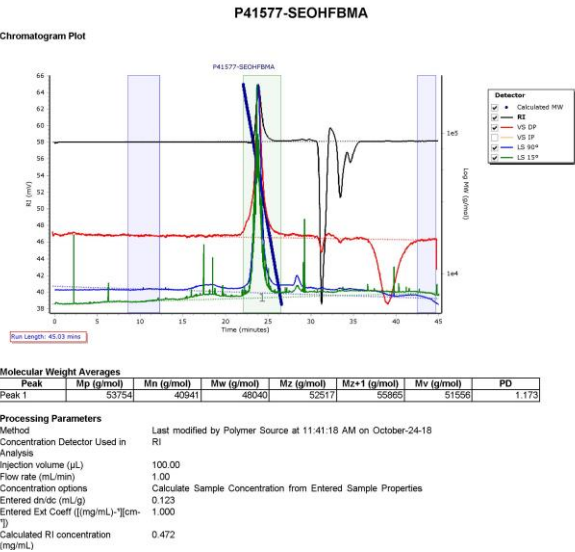
Agilent GPC/SEC Software



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	Insoluble
THF	Clear at 35 °C
Acetone	Soluble at Room temperature
DMF	Insoluble