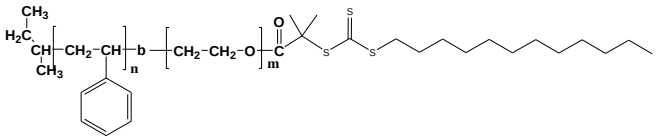
Sample Name: **RAFT end functionalized Poly (styrene-b-ethylene oxide)**

Sample #: **P41524A-SEO-RAFT**

Structure:

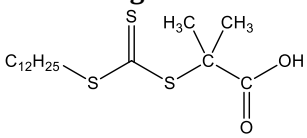


Composition:

Mn x 10^3 S-b-EO	12.5-b-6.5
PDI	1.01
RAFT functionality by HNMR	> 98 %

Synthesis:
SEO (OH) end group esterifies with RAFT reagent.

RAFT reagent Structure:

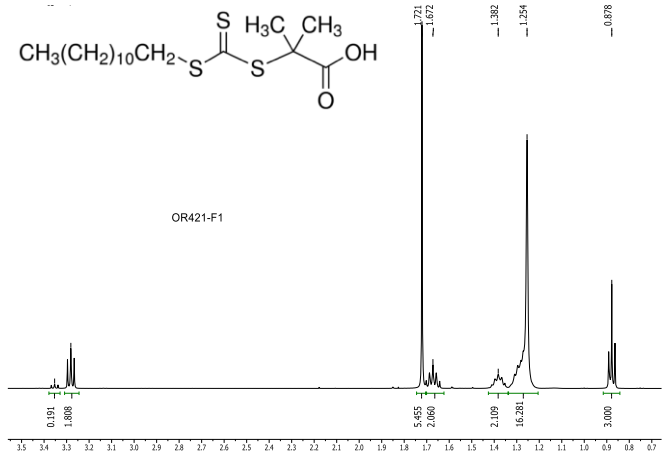


Chemical Formula: $C_{17}H_{32}O_2S_3$
Molecular Weight: 364.6

M.p.:	57–63°C
Storage temperature:	2–8°C
Purity:	> 95 %

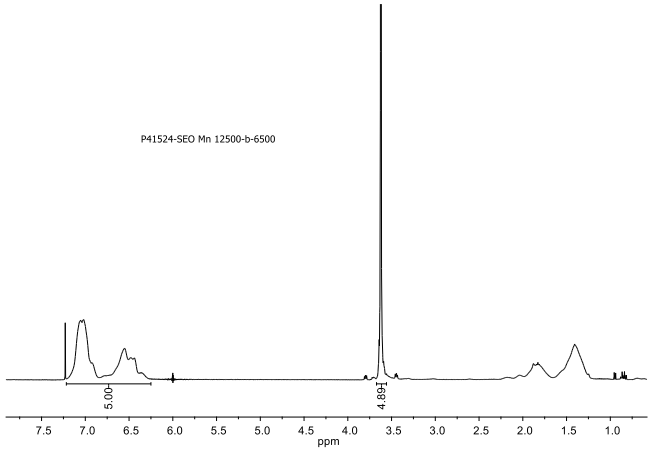
RAFT reagent Characterization:
The chemical structure of the product was confirmed by ^{1}H NMR.

^{1}H NMR spectrum of the Raft reagent:

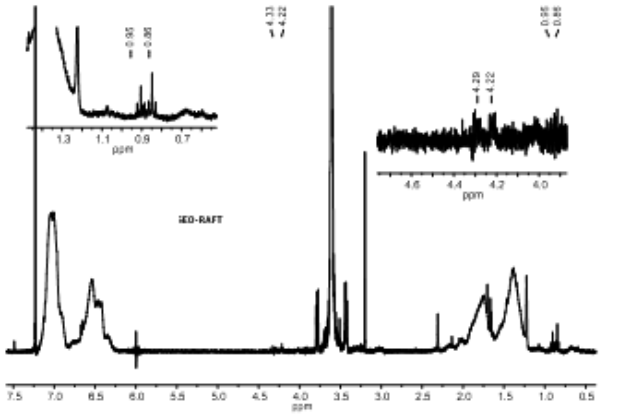


Characterization:
The product was characterized by size exclusion chromatography (SEC) and ^{1}H NMR.

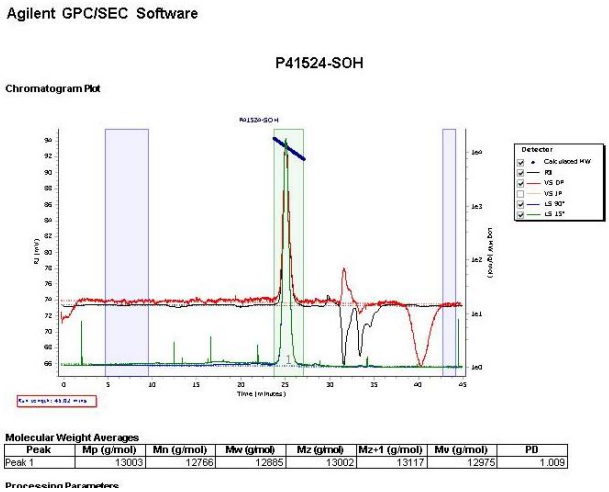
^{1}H NMR spectrum of the SEO sample:



HNMR spectrum of SEO-terminated with RAFT:



SEC profile of the SOH Sample:



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	13003	12766	12885	13002	13117	12975	1.009

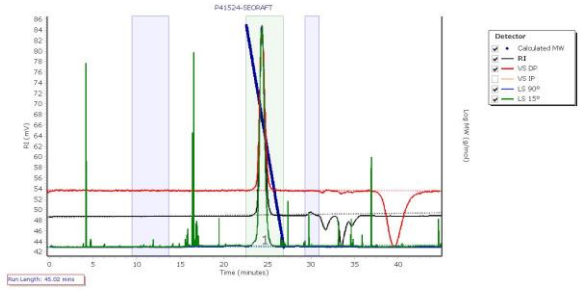
Processing Parameters

SEC profile of the Sample:

Agilent GPC/SEC Software

P41524-SEORAFT

Chromatogram Plot



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	19595	19343	19415	19486	19555	19471	1.004

Processing Parameters

Method	Last modified by Polymer Source at 11:41:18 AM on October-24-18
Concentration Detector Used in Analysis	RI
Injection volume (µL)	100.00
Flow rate (mL/min)	1.00
Concentration options	Calculate Sample Concentration from Entered Sample Properties
Entered dn/dc (mL/g)	0.148
Entered Ext Coeff ([(mg/mL)-*][cm-*])	1.000
Calculated RI concentration (mg/mL)	1.705