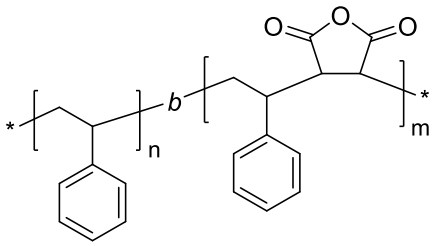
Sample Name: **Poly(styrene)-b- (styrene-alt-maleic anhydride)**

Sample #: **P16384-SSMaA**

Structure:

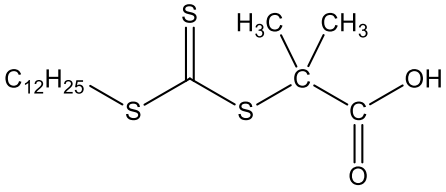


Composition:

Mn x 10^3 S-b-(S-alt-MaA)	PDI
5.5-b-16.5	1.05

Synthesis Procedure:
The polymer was synthesized by RAFT polymerization process following literature method [1)].

RAFT CTA structure for the polymerization:

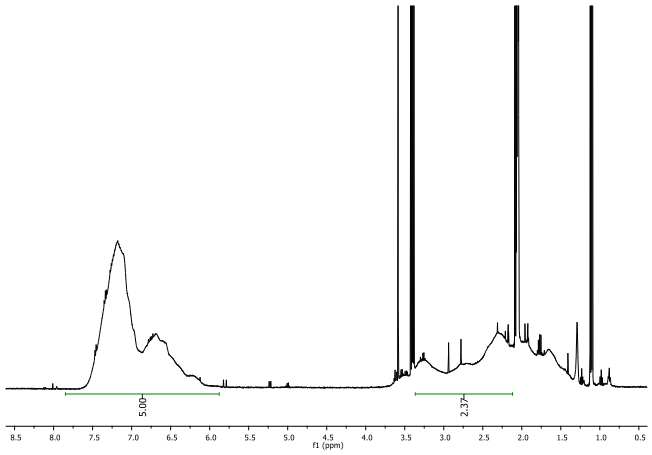


Chemical Formula: $C_{17}H_{32}O_2S_3$
Molecular Weight: 364.6

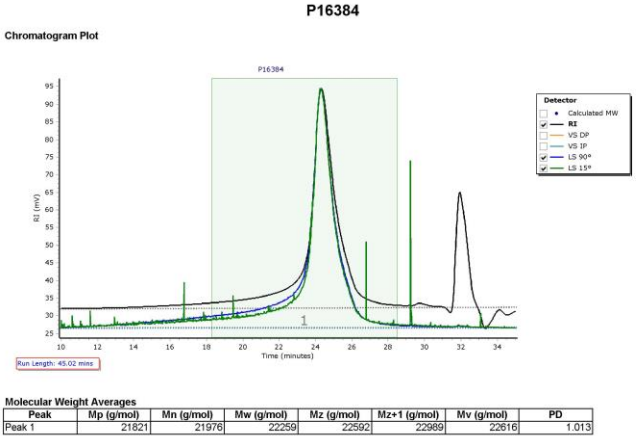
Characterization:
The product was characterized by size exclusion Chromatography (SEC) using polystyrene as standard. The composition was obtained from ^{1}H NMR by comparing aromatic protons at 6.5-7.6 ppm and maleic anhydride protons at 2.2-3.8 ppm.

Solubility:
Polymer is soluble in Acetone, DMF and THF. It precipitates from diethyl ether.

^{1}H NMR Spectrum of the polymer in acetone-d6:



SEC elugram of the block copolymer:



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	21821	21976	22259	22592	22989	22616	1.013

Reference:

1) Antalek B., Slater L., Bennett G., Macromolecules, 2019, 1025-1032