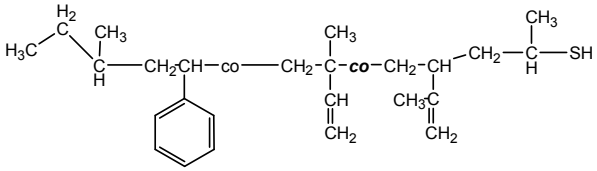
Sample Name:

Thiol end functionalized Random Copolymer
Poly (styrene-co-isoprene)
Sample #: P19405-SIpranSH

Structure:



Composition:

Styrene : 70.00 mol%

Mn x 10^3 PS-co-PIp	PDI
53.5	1.16
T_g for random polymer	6.5 oC
% disulfide linkage	<10%

Synthesis Procedure:

By anionic process.

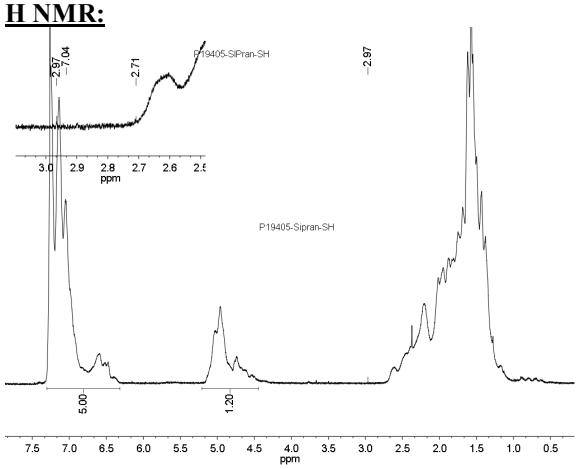
Characterization:

The polymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The copolymer composition was calculated from ^{1}H-NMR spectroscopy.

Thermal analysis:

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10^{o}C/min.The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

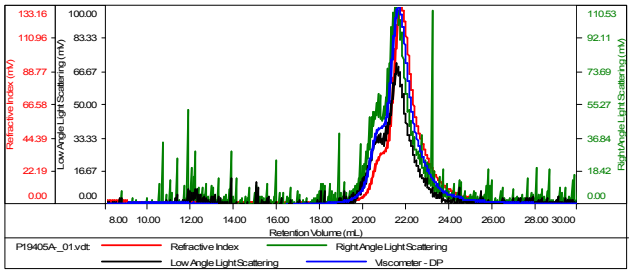
H NMR:



SEC of the random copolymer:

Sample ID:P19405A-Sipran SH

Concentration (mg/mL)	1.0799
Sample dn/dc (mL/g)	0.1600
Method File	PS80K-June30-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersi	Intrinsic Viscosity (dL/g)
P19405A-_01.vdt	53,703	62,144	61,855	1.157	2.3088

Thermogram of the sample:

Sample: P19405-SIP-SH
Size: 5.0000 mg
DSC
File: P19405.001