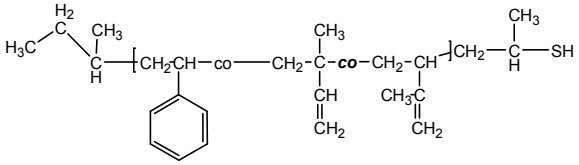
Sample Name:

Thiol end functionalized Random Copolymer
Poly (styrene-co-isoprene)
Sample #: P19409-SIpranSH

Structure:



Composition:

Styrene : 65.00 mol%

Mn x 10^3 PS-co-PIp	PDI
46.0	1.18
T_g for random polymer	19 oC
% disulfide linkage	<10%

Synthesis Procedure:

By anionic process.

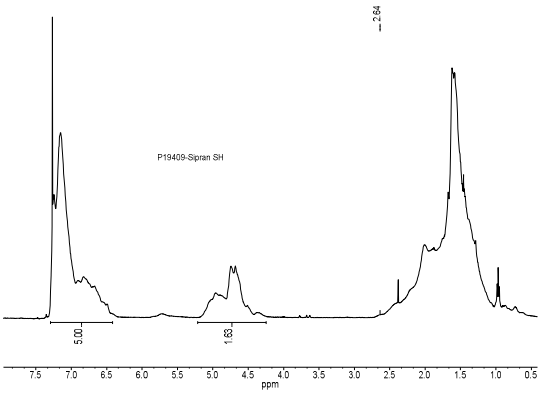
Characterization:

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).

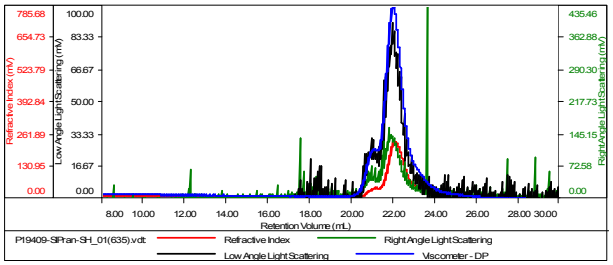
H NMR:



SEC of the random copolymer:

Sample ID:P19409-Sipran SH

Concentration (mg/mL)	1.5749
Sample dn/dc (mL/g)	0.1570
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)
P19409-SIPran-SH_01(635).vdt	45,295	53,257	45,873	1.176	2.0156

Thermogram of the sample: