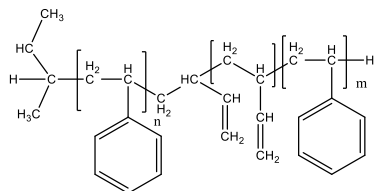


Sample Name:

**Poly(styrene)-b-poly(1,2-butadiene)-b-poly(styrene)**

Sample #: **P44574-SBdS**

Structure:

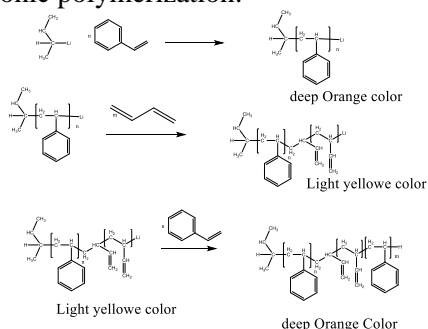


Composition:

Mn x 10 <sup>3</sup> (S-b-Bd-S)	PDI
10-b-50-b-10	1.01
T <sub>g</sub> for PBd block	-03°C
T <sub>g</sub> for PS block	108°C
PS wt%	32

Synthesis Procedure:

Poly(styrene)-b-butadiene-b-styrene) is prepared by living anionic polymerization:



Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

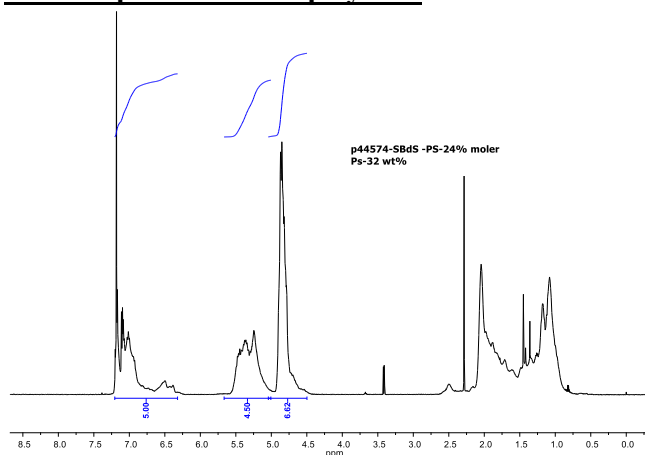
Thermal analysis

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 20°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<sub>g</sub>).

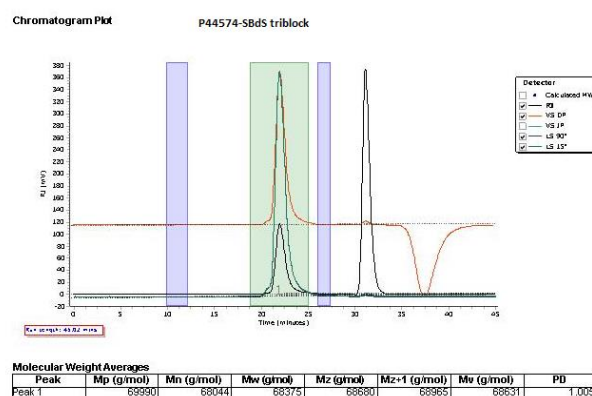
Solubility:

Polymer is soluble in THF, toluene and CHCl<sub>3</sub>. It precipitates from methanol, ethanol, water, and hexane (depending on the compositions).

**HNMR spectrum of the polymer:**



**SEC elugram of the Sample:**



**Thermogram for Bd and PS block polymers:**

