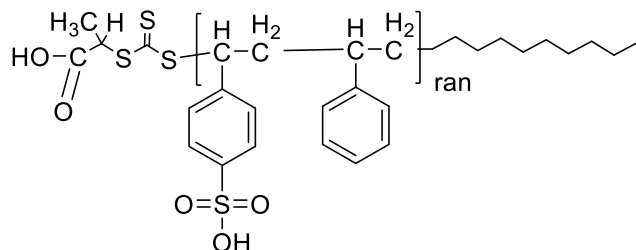


Sample Name:
Poly(styrene-co-Styrene sulfonic acid)

Sample #: P42558-SSSO3Hran

Structure:

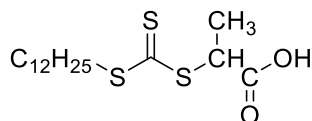


Composition: Sulfonation in the first block: 4%

$M_n \times 10^3$ SSSO3Hran	M_w/M_n (PDI)
28.5	1.06

Synthesis Procedure:

The polymer is prepared by RAFT polymerization process using following RAFT reagent:



Characterization:

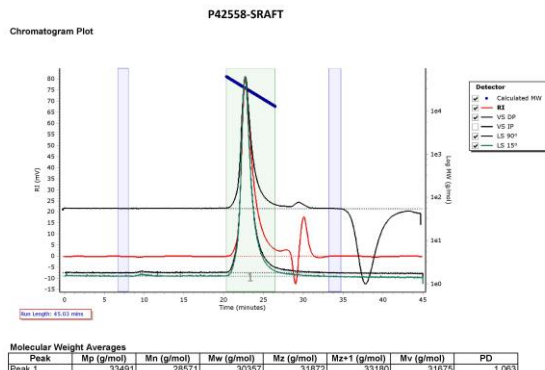
The product was characterized by size exclusion chromatography (SEC) and ^1H -NMR data analysis.

Thermal analysis:

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of $10^\circ\text{C}/\text{min}$. 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).

SEC profile of the PS-RAFT starting polymer:

Agilent GPC/SEC Software



^1H -NMR spectrum of the Polymer:

