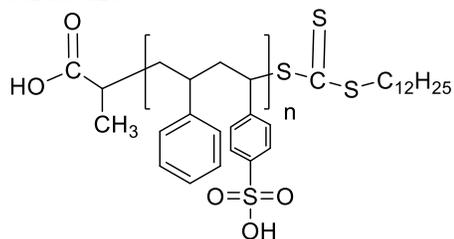


Sample Name:

POLY(STYRENE-CO-4-STYRENE SULFONIC ACID)-RAFT-agent terminated

Sample #: **P42596E-SSSO3Hran**

Structure:

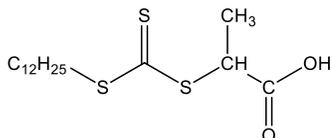


Composition:

| | |
|----------------------|------|
| Mn × 10 ³ | PDI |
| 37.5 | 1.03 |
| Sulfonation | 20% |

Synthesis Procedure:

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

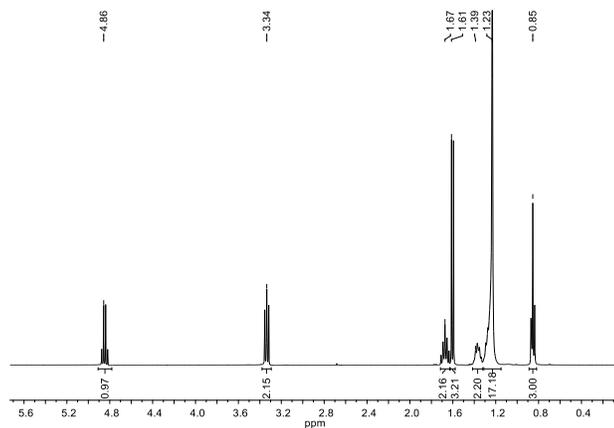


Chemical Formula: C₁₆H₃₀O₂S₃
Molecular Weight: 350.59

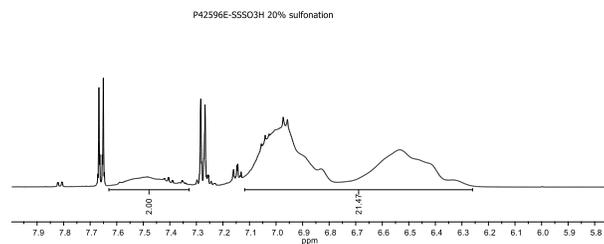
Characterization:

The molecular weight and polydispersity index (PDI) of the polymer are obtained by size exclusion chromatography (SEC) in THF as eluent.

¹H-NMR spectrum of the RAFT (CDCl₃):



¹H-NMR spectrum of the sample:

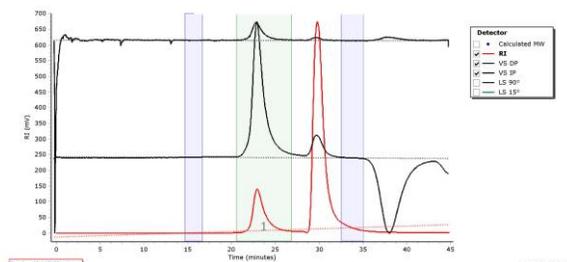


SEC elugram of the Sample:

Agilent GPC/SEC Software

P42596-RAFT

Chromatogram Plot



Molecular Weight Averages

| Peak | Mp (g/mol) | Mn (g/mol) | Mw (g/mol) | Mz (g/mol) | Mz+1 (g/mol) | Mw (g/mol) | PD |
|--------|------------|------------|------------|------------|--------------|------------|------|
| Peak 1 | 34056 | 30953 | 31884 | 32723 | 33478 | 32687 | 1.03 |

Procession Parameters

% sulfonation: 20% Mn: 37,500