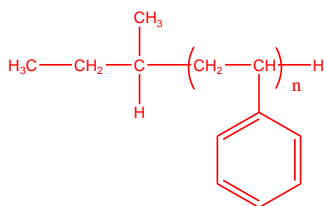


Sample Name: Polystyrene

Sample #: P41449-S

Structure:

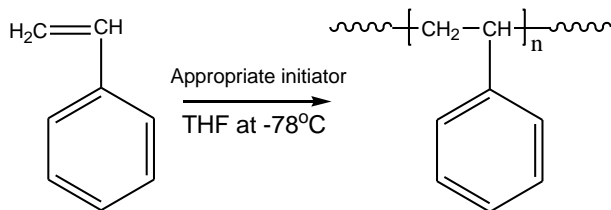


Composition:

Mn x 10 ³	PDI
3,647.0	1.13
Tg	84 °C

Synthesis Procedure:

Polystyrene is obtained by living anionic polymerization of styrene as illustrated below:



Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatography equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

Solubility:

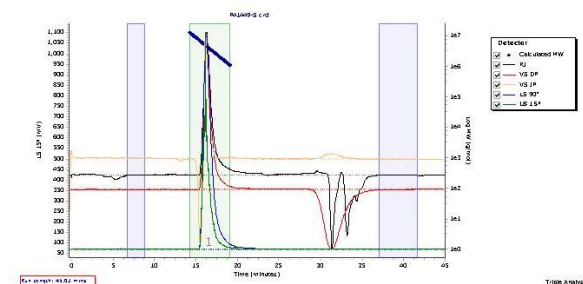
Polystyrene is soluble in DMF, THF, toluene and CHCl₃. It precipitates from methanol, ethanol, water and hexanes.

SEC elugram of the polymer in THF:

Agilent GPC/SEC Software

P41449-S.crd

Chromatogram Plot



Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mz (g/mol)	PDI
------	------------	------------	------------	------------	--------------	------------	-----

Peak 1	4651572	3647072	4127756	4478906	4753532	4367687	1.132
--------	---------	---------	---------	---------	---------	---------	-------

DSC thermogram of the polymer:

Sample: P40517
Size: 15.3000 mg

File: P40517.001

