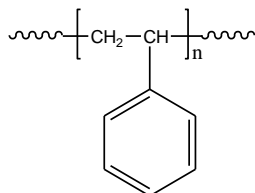


Sample Name: Polystyrene

Sample #: P1099E-S

**Structure:**

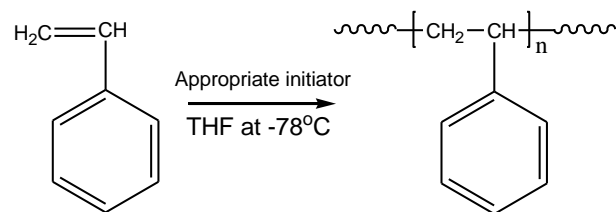


**Composition:**

Mn x 10 <sup>3</sup>	PDI
2,586.0	1.28

**Synthesis Procedure:**

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



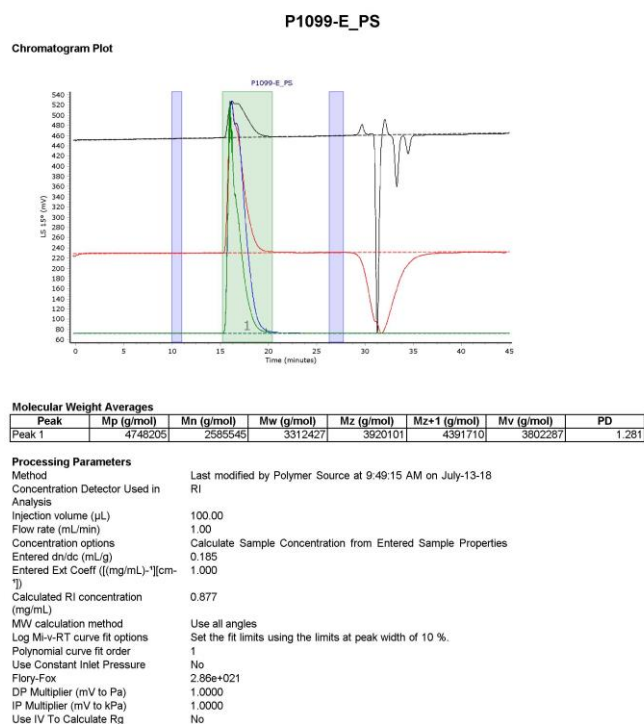
**Characterization:**

The molecular weight was calculated from <sup>1</sup>H NMR and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Malven liquid chromatography equipped with refractive and light scattering detectors. Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min.

**Solubility:**

Polystyrene is soluble in DMF, THF, toluene and CHCl<sub>3</sub>. It precipitates from methanol, ethanol, water and hexanes.

**SEC elugram of the homopolymer:**



**DSC thermogram of Polystyrene:**

