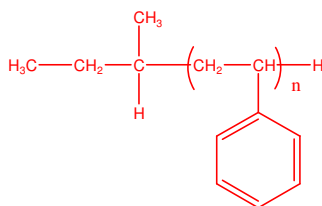


Sample Name: Polystyrene

Sample #: P40069-S

Structure:

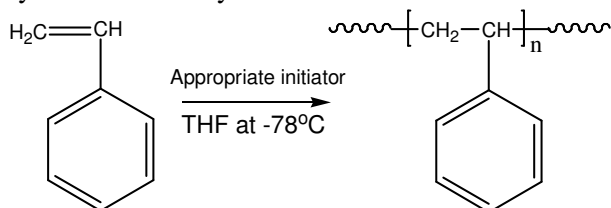


Composition:

| Mn x 10 ³ | PDI |
|----------------------|------|
| 670.0 | 1.24 |

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 chromatograph 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.

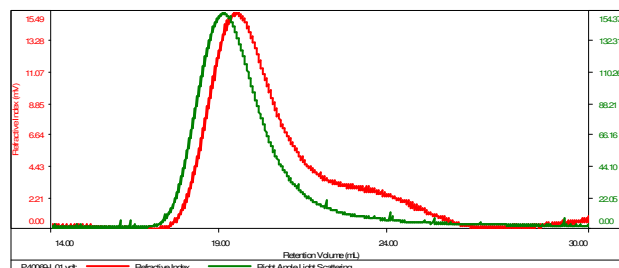
Solubility:

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

SEC elugram of the polymer in THF

Sample ID: P40069-I-S

| | |
|-----------------------|----------------------------|
| Concentration (mg/mL) | 0.8114 |
| Sample dn/dc (mL/g) | 0.1850 |
| Method File | PS80K-4August2016-0000.vom |
| Column Set | 3x PL 1113-6300 |
| Solvent | THF |



| Sample | Mn (Da) | Mw (Da) | Mw/Mn | IV (dL/g) | Mp (Da) |
|-----------------|---------|---------|-------|-----------|---------|
| P40069-I_01.vdt | 670,508 | 826,574 | 1.233 | 2.0520 | 817,204 |