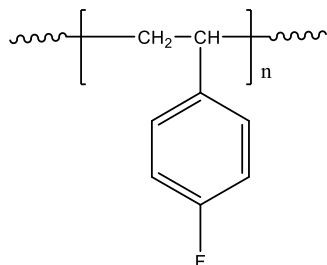


Sample Name: Poly(4-fluorostyrene)

Sample #: P43486-4FS

Structure:



Composition:

$M_n \times 10^3$	PDI
45.0	1.4

Synthesis Procedure:

Poly 4-fluorostyrene is obtained by anionic polymerization process using $(\text{Ph})_3\text{CK}$ and $t\text{BuOK}$ as additive.

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.

Thermal analysis was performed on TA Instruments Q100 differential scanning calorimeter (DSC) under a nitrogen atmosphere. The glass transition temperature (T_g) of the product was measured at a scan rate of $10^\circ\text{C}/\text{min}$ shortly after creating thermal history of the sample.

Solubility:

Polymer is soluble in DMF, THF, toluene and CHCl_3 . It precipitates from methanol, ethanol, water, and hexanes.

SEC elugram of the Sample:

