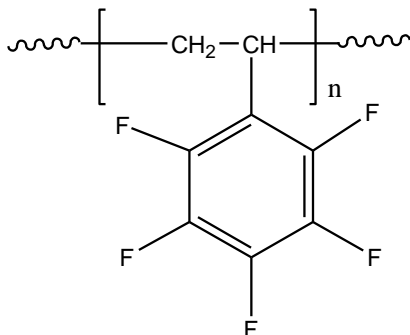


Sample Name: Poly pentafluoro styrene

Sample #: P16249-5FS

**Structure:**



**Composition:**

$M_n \times 10^3$	PDI
18.0	1.19
$T_g$ (°C)	93

**Synthesis Procedure:**

Poly Penta fluorostyrene is obtained by controlled radical polymerization process.

**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 of the sample was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature ( $T_g$ ) has been considered.

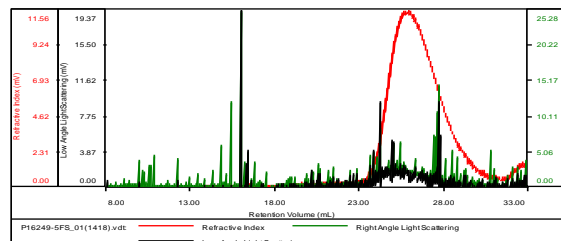
**Solubility:**

Polymer is soluble in DMF, THF, toluene and  $\text{CHCl}_3$ . It precipitates from methanol, ethanol, water and hexanes.

**SEC elugram of Homopolymer:**

P16249-5FS

Concentration (mg/mL)	1.7038
Sample dn/dc (mL/g)	0.1520
Method File	PS80K-august2017-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	$M_n$ (Da)	$M_w$ (Da)	$M_w/M_n$	IV (dL/g)	$M_p$ (Da)
P16249-5FS_01(1418).vdt	18,285	21,737	1.189	0.2020	19,805

**DSC thermogram for the polymer:**

