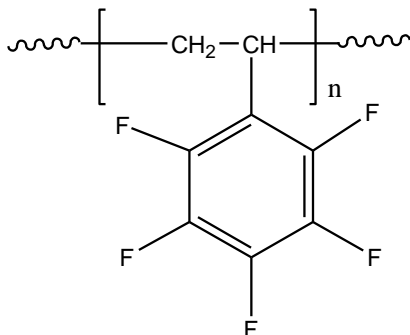


Sample Name: Poly pentafluoro styrene

Sample #: P16252-5FS

**Structure:**



**Composition:**

$M_n \times 10^3$	PDI
6.0	1.3
$T_g (^{\circ}\text{C})$	99

**Synthesis Procedure:**

Poly Penta fluorostyrene is obtained by RAFT 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  $10^{\circ}\text{C}/\text{min}$ . The inflection glass transition temperature ( $T_g$ ) has been considered.

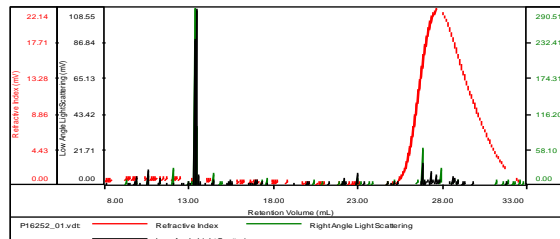
**Solubility:**

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

**SEC of Homopolymer:**

P16252-5FS

Concentration (mg/mL)	2.6344
Sample dn/dc (mL/g)	0.1700
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)
P16252_01.vdt	5,783	7,753	1.341	0.1869	6,083

**DSC thermogram for the polymer:**

