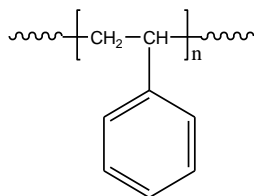


Sample Name: Polystyrene

Sample#: P43183-S

**Structure:**



**Composition:**

$M_n \times 10^3$ (g/mol)	$M_w/M_n$
4.2	1.05

CAS registry number: 9003-53-6

**Synthesis Procedure:**

Polystyrene was obtained by living anionic polymerization of styrene using lithium Naphthalene initiator.

**Characterization:**

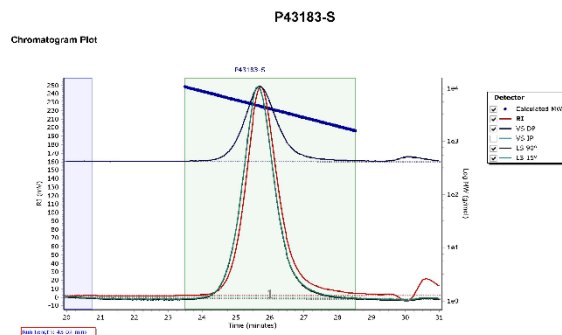
The molecular weight and polydispersity index of the polymer were determined by size exclusion chromatography (SEC) in THF at 30°C. SEC analysis was performed on Agilent Technologies 1260 Infinity II GPC/SEC system equipped with triple detector and three columns.

**Solubility:**

Polystyrene is soluble in chloroform, tetrahydrofuran (THF), dimethylformamide (DMF), and toluene.

The product precipitates from methanol, ethanol, water, and hexanes.

**SEC chromatogram of the polymer in THF:**



Molecular Weight Averages						
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)
Peak 1	4581	4284	4507	4704	4891	4548