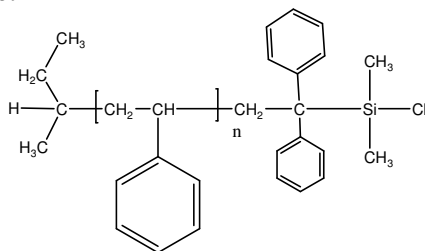


Sample Name:  
**Dimethyl Chlorosilane Terminated Polystyrene**

**Sample ID: P400018-S**

Sample #: **P40018-SSiCl**

**Structure:**

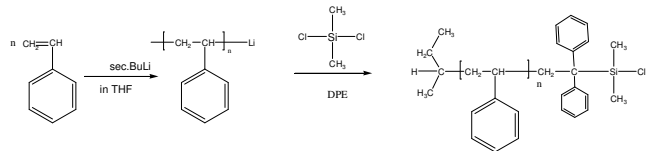


**Composition:**

$M_n \times 10^3$	PDI	Functionality SiCl
6.0	1.04	>98%

**Synthesis Procedure:**

The polymer was synthesized by anionic process. The scheme of the reaction is illustrated below:

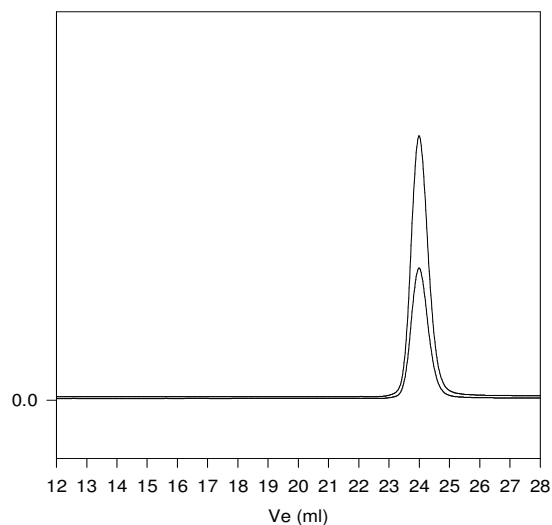


**Characterization:**

The polymer was characterized by SEC and  $^1\text{H}$  NMR.

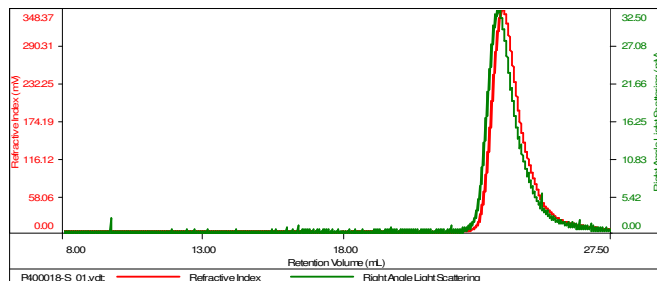
**SEC elugram of the polymer:**

**P40018-SSiCl**



Size exclusion chromatography of polystyrene terminated with dimethyl chlorosilane:  
 $M_n=6,000$ ,  $M_w=6,2000$ ,  $PI=1.03$ : before and after termination

Concentration (mg/mL)	7.4652
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-30JUNE2016-0000.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)
P400018-S_01.vdt	5,882	6,131	1.042	0.0786	5,905

**FTIR spectrum of the product:**

FTIR spectrum of the polymer clearly shows the presence of SiCl at  $1217\text{ cm}^{-1}$  and SiCH<sub>3</sub> at  $1254\text{ cm}^{-1}$ .

