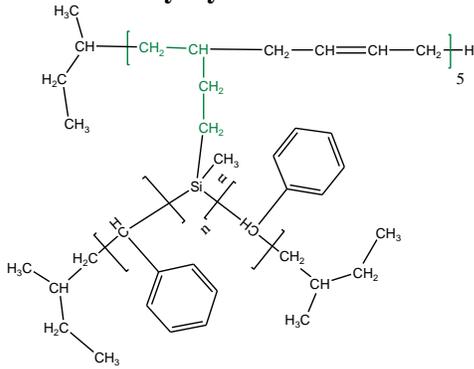
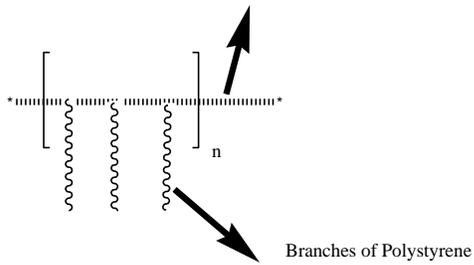


**Sample Name: P18380-10S**  
**10- arms Poly styrene**

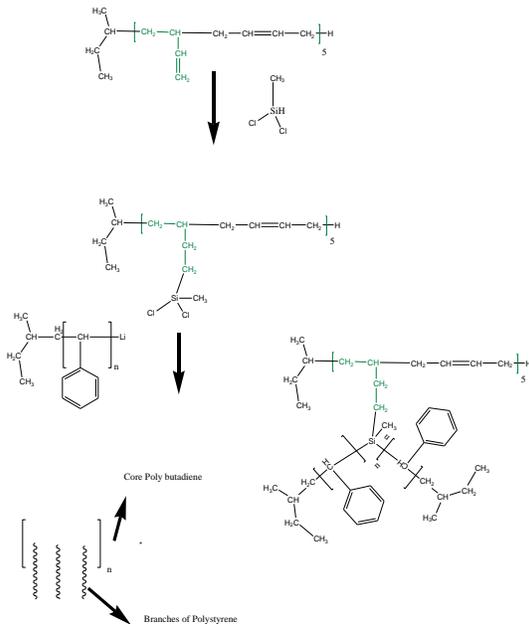


Core Poly butadiene



Mn x 10 <sup>3</sup> (total)	PDI
109.5	1.15
Mn of each arm: (10.5)	

**Synthesis Procedure:**



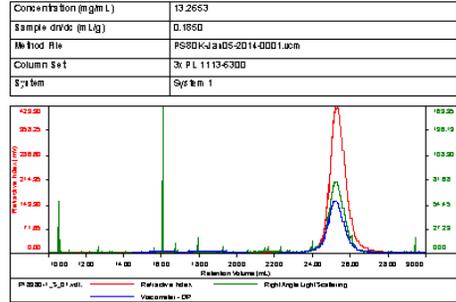
Core Poly butadiene

Branches of Polystyrene

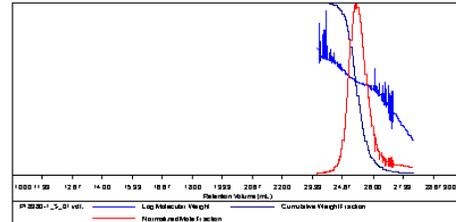
**Molecular Weight:** Size exclusion chromatography (SEC): Varian liquid chromatograph equipped with UV and refractive detector. SEC columns from Supelco were used with THF as the eluent. The columns were calibrated with monodisperse polystyrene. The molecular weights and the polydispersity indice of the side-arm were calculated. The

absolute molecular weight of the star-like polymer was determined by light scattering detector.

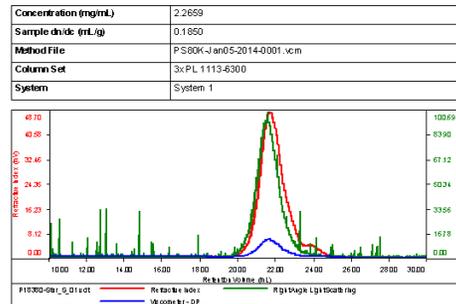
SEC of the Polymer: (eah branch of Polystyrene)  
**Sample ID: P18380-S Branch**



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18380-1_S_01.vdt	11,695	12,383	12,375	1.059	0.1138



Sample ID: P18380-S Star



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18380-Star_S_01.vdt	108,197	125,032	129,267	1.145	0.3288

