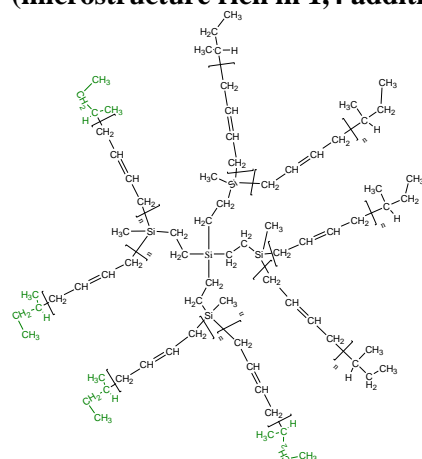


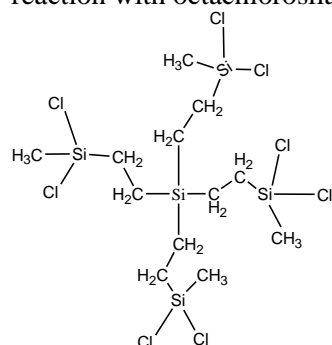
Sample Name: P18385-8Bd
Eight arms Poly butadiene
(microstructure rich in 1,4 addition)



$M_n \times 10^3$ (Mn total)	PDI
178.0	1.04
(Mn of each arm: (24.0))	

Synthesis Procedure:

The 8 arm-polymer was prepared by anionic living polymerization of butadiene in non-polar solvent, and then the star polymer was obtained by coupling reaction with octachlorosilane derivative. Linker



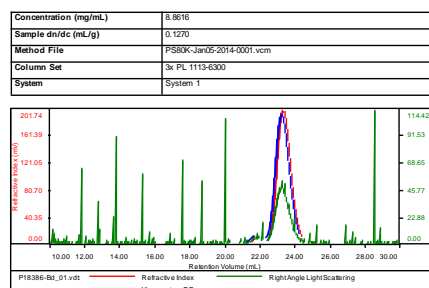
Purification Using Octafunctional linker reagent does not guarantee the formation of 8 arms architecture. In this case the obtained polymer shows the formation of 8 arms architecture. Polymer was fractionated to remove any unlinked fractions of homo-polybutadiene. Polymer precipitated in ethanol and dried under vacuum at 40 oc for 24h.

Characterization:

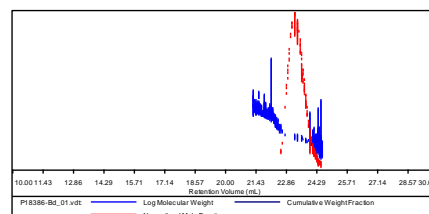
Molecular Weight: Size exclusion chromatography (SEC): Varian liquid chromatograph equipped with UV and refractive detector. SEC columns from Supelco were used with THF as the eluent. The molecular weights and the polydispersity indice of the side-arm were calculated. The absolute molecular weight of the star-like polymer was determined by light scattering detector.

For the PBd branch:

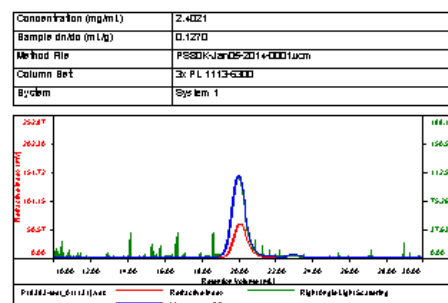
Sample ID: P18385-Bd



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18385-Bd_01.vdt	23,832	24,753	23,223	1.039	0.4421



Sample ID: P18385-Star Bd



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18385-Star_Bd_01(131).vdt	178,137	184,743	183,570	1.037	0.28973

