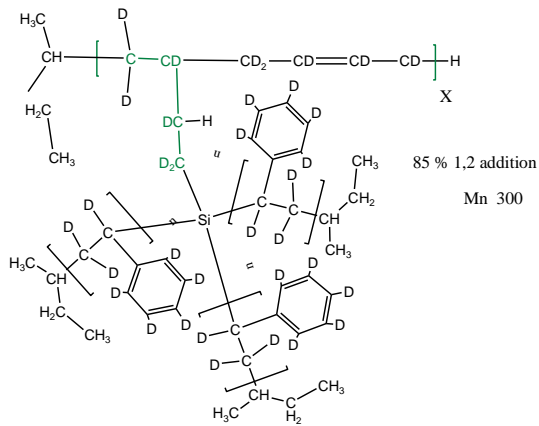
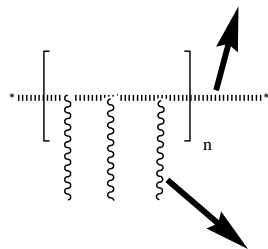


**Sample Name: P18453**  
**12-arms Deuterated Poly styrene- (d8)**



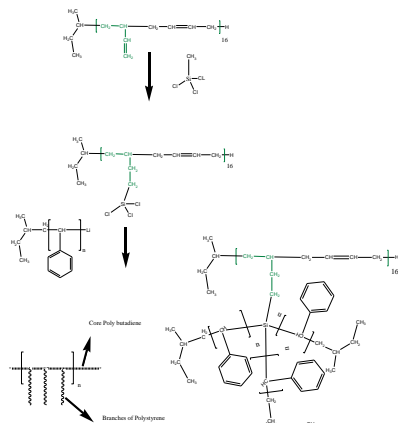
Core of Deuterated Poly butadiene



Branches of Deuterated Polystyrene

|                                 |      |
|---------------------------------|------|
| Mn x 10 <sup>3</sup><br>(total) | PDI  |
| 19.5                            | 1.06 |
| Mn of each arm: (1.6)           |      |

**Synthesis Procedure:**

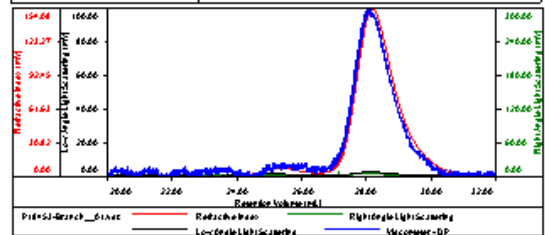


**Linker : Pd6Bd:** Lot # P18427 85 % 1,2 addition Prepare in THF

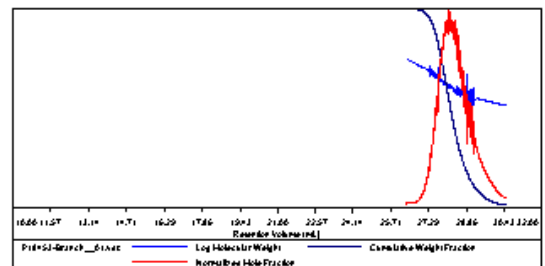
SEC of the Polymer: (eah branch of Polystyrene)

**Sample ID: P18453-dPS Branch**

|                       |                           |
|-----------------------|---------------------------|
| Concentration (mg/mL) | 6.2321                    |
| Sample dn/dc (mL/g)   | 0.1850                    |
| Method File           | PS80K-Jan05-2014-0001.vcm |
| Column Set            | 3x PL 1113-6300           |
| System                | System 1                  |

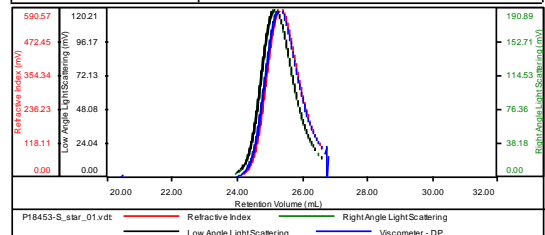


| Sample               | Mn    | Mw    | Mp    | Mw/Mn | IV     |
|----------------------|-------|-------|-------|-------|--------|
| P18453-Branch_01.vdt | 1,642 | 1,717 | 1,748 | 1.045 | 0.0369 |



**Sample ID: P18453-dPS Star**

|                       |                           |
|-----------------------|---------------------------|
| Concentration (mg/mL) | 23.5274                   |
| Sample dn/dc (mL/g)   | 0.1850                    |
| Method File           | PS80K-Jan05-2014-0001.vcm |
| Column Set            | 3x PL 1113-6300           |
| System                | System 1                  |



| Sample               | Mn     | Mw     | Mp     | Mw/Mn | IV     |
|----------------------|--------|--------|--------|-------|--------|
| P18453-S_star_01.vdt | 19,307 | 21,268 | 21,491 | 1.102 | 0.0579 |

