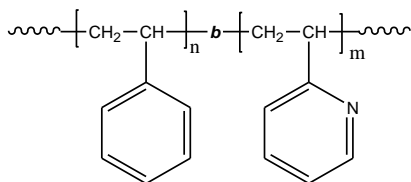


Sample Name: Polystyrene-*block*-poly (2-vinyl pyridine)

Sample #: P41204-S2VP

Structure:



Composition:

| Mn x 10 ³ PS-b-2VP | PDI |
|-----------------------------------|-------------------------------------|
| 42.0-b-48.0 | 1.07 |
| T _g for PS block: 98°C | T _g for 2VP block: 146°C |

Synthesis Procedure:

Polystyrene-*b*-poly (2-vinyl pyridine) was prepared by living anionic polymerization in THF at -78°C in the presence of LiCl as an additive.

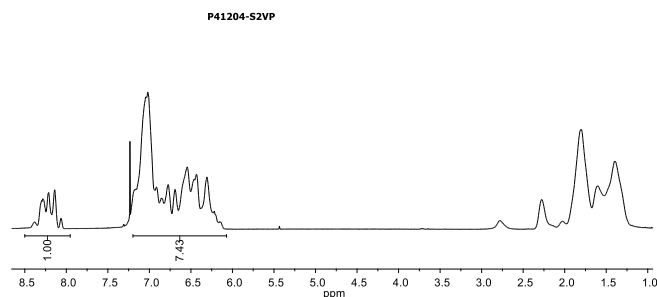
Characterization:

The product was characterized by size exclusion chromatography (SEC) and ¹H NMR.

Solubility:

Poly (styrene-*b*-2 vinylpyridine) is soluble in THF, toluene, and CHCl₃. The diblock copolymer can also be solubilized in methanol, ethanol depending on its composition. The polymer readily precipitates from hexanes, ether and water.

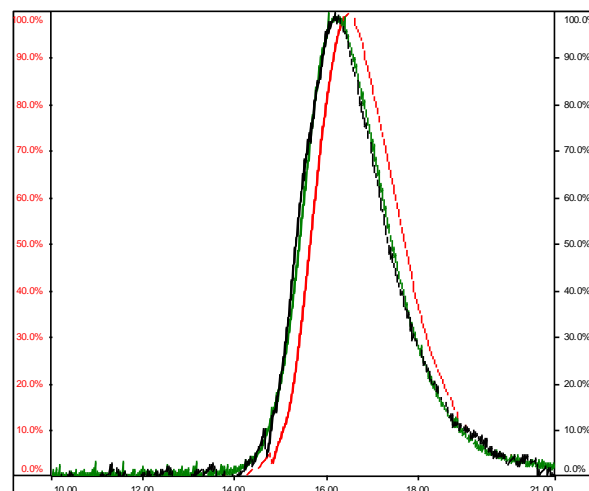
H-NMR Spectrum of the Sample:



SEC elugram of the S block:

P41204-1-S

| | |
|-----------|---------------------------|
| Conc | 1.4506 |
| dn/dc | 0.1650 |
| Solvent | DMF w 0.023M LiBr |
| Flow Rate | 0.7000 |
| Method | PS99k_2018-05-30-0000.vcm |

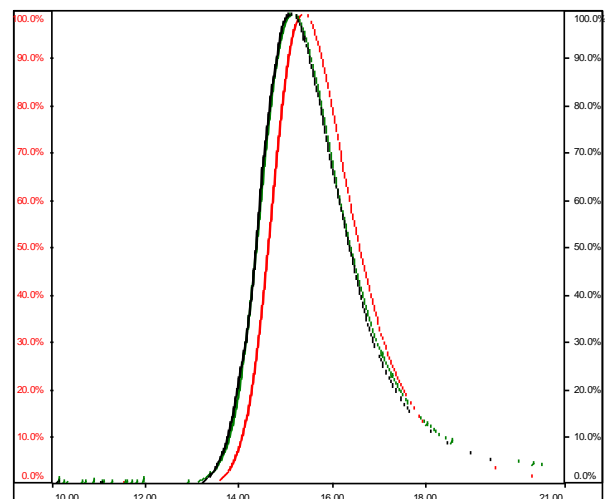


| Sample | Mn | Mw | Mp | Mw/Mn | IV |
|-----------------|--------|--------|--------|-------|--------|
| P41204-1_01.vdt | 42,460 | 45,903 | 41,957 | 1.081 | 0.5718 |

SEC elugram of the Sample:

P41204-S2VP

| | |
|-----------|---------------------------|
| Conc | 3.8848 |
| dn/dc | 0.1600 |
| Solvent | DMF w 0.023M LiBr |
| Flow Rate | 0.7000 |
| Method | PS99k_2018-05-30-0000.vcm |



| Sample | Mn | Mw | Mp | Mw/Mn | IV |
|--------------------|--------|---------|--------|-------|--------|
| P41204-S2VP_01.vdt | 99,881 | 106,736 | 97,160 | 1.069 | 0.8963 |