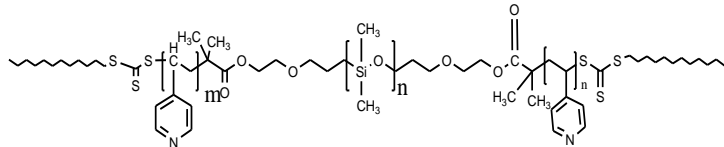


Sample Name:

Poly(4-vinyl pyridine-b-dimethylsiloxane -b-4-vinyl pyridine)

Sample #: **P16203C-4VPDMS4VP**

Structure:



Composition:

Mn x 10 ³ 4VP-b-PDMS-b-4VP	PDI
10.0-b-5.0-b-10.0	1.08

Synthesis Procedure:

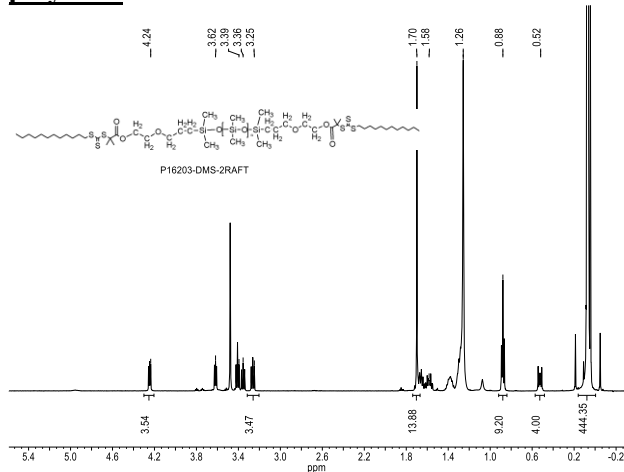
Poly(4-vinyl pyridine-b-dimethylsiloxane -b-4-vinyl pyridine) is prepared by RAFT polymerization process.

Characterization:

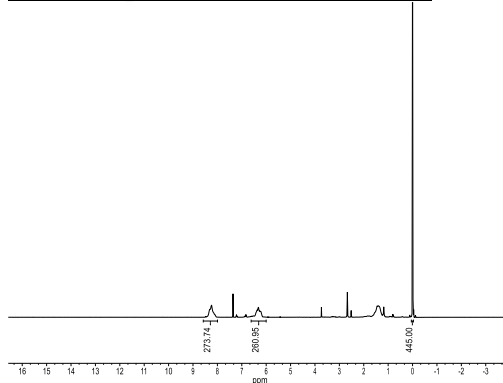
The product was characterized by size exclusion chromatography (SEC) and ¹H NMR.

GPC of the PDMS macro-initiator was carried out in THF at 35 °C and the block copolymer with 4VP was carried out in DMF at 50 °C. The PDMS is not soluble in DMF, the block copolymer was solubilize in DMF. The composition of the block copolymer was determined by HNMR and the Mw/Mn was determined by eluting polymer in DMF.

HNMR Spectrum of the PDMS-RAFT telechelic polymer:



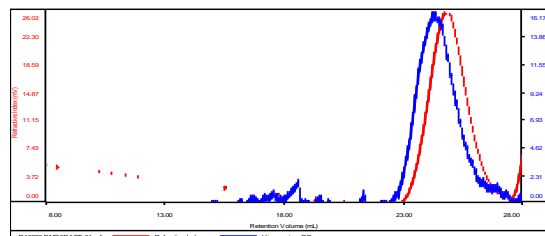
HNMR Spectrum of the Polymer:



SEC elugram of the PDMS 2RAFT:

P16203-DMS2RAFT

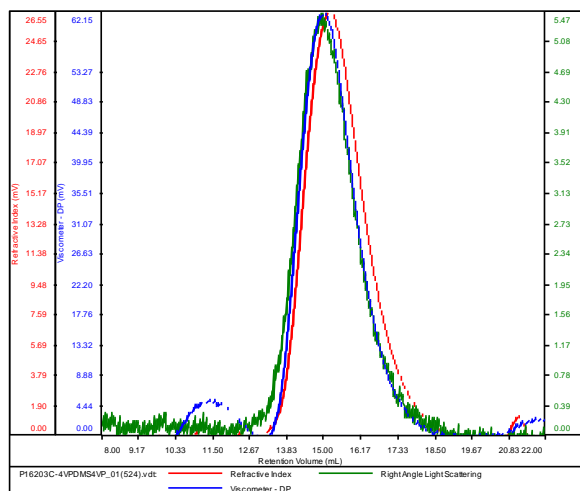
Concentration (mg/mL)	0.4322
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-Feb2017-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



SEC elugram of the Polymer:

P16203C-4VPDMS4VP

Conc	2.8090
dn/dc	0.1530
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80K-May2017-0000.vcm



Sample	MW Number Average	MW Weight Average	MW at Peak	Polydispersity	Intrinsic Viscosity
P16203C-4VPDMS4VP_01(524).vdt	23,811	25,667	25,032	1.078	0.5020