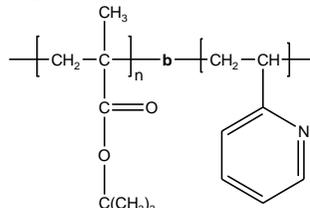


Sample Name:

**Poly(t-butyl methacrylate-b-2-vinyl pyridine)**

Sample #: **P43098-tBuMA2VP**

Structure:



Composition:

Mn x 10 <sup>3</sup> tBuMA-b-2VP	PDI
35.0-b-220.0	1.07
T <sub>g</sub> for tBuMA block	103°C
T <sub>g</sub> for 2VP block	Not distinct

**Synthesis Procedure:**

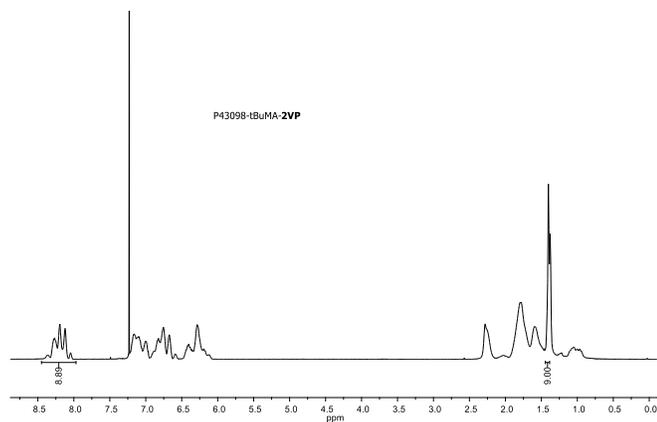
Poly(t-butyl methacrylate-b-2-vinyl pyridine) is synthesized by living anionic polymerization with sequence addition of **t-butyl methacrylate followed by 2-vinyl pyridine** using an RLi/LiCl adduct.

**Characterization:**

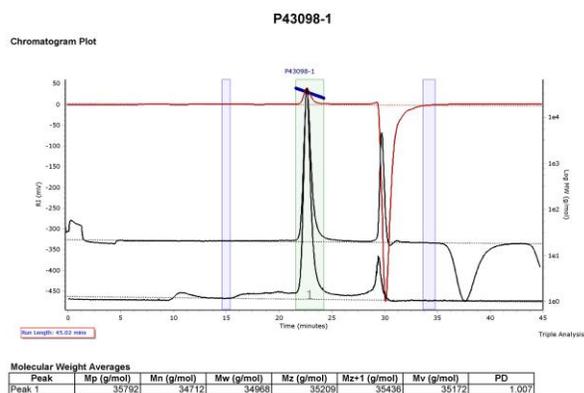
The product was characterized by size exclusion chromatography (SEC) and <sup>1</sup>H-NMR data analysis.

Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature (T<sub>g</sub>) has been considered.

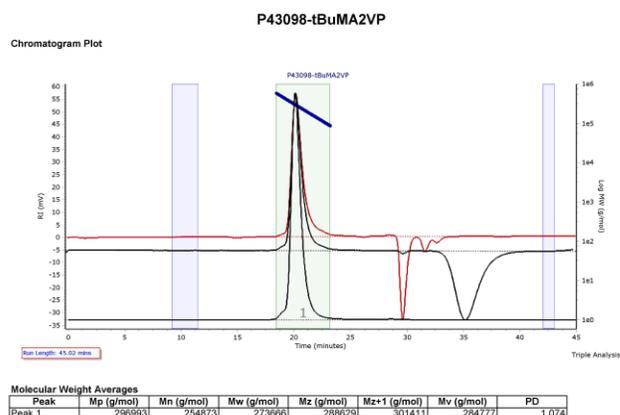
**<sup>1</sup>H-NMR Spectrum of the block copolymer:**



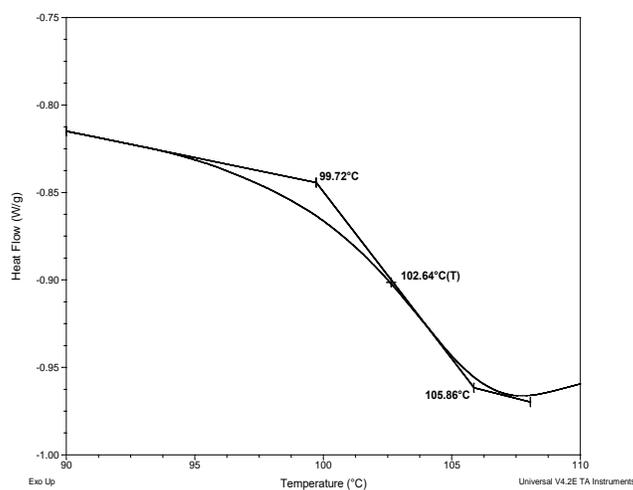
**SEC elugram of the PtBuMA block:**



**SEC elugram of PtBuMA-b-2VP:**



**Thermogram for the polymer:**



**Reference:**

**S. K. Varshney, X. F. Zhong and A. Eisenberg**  
*Macromolecules*, 1993, 26, 701-706.