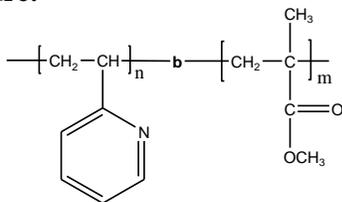


Sample Name:

Poly(2-vinyl pyridine-b-methyl methacrylate)

Sample #: **P42769-2VPMMA**

Structure:



Composition:

Mn x 10 ³ 2VP-b-MMA	Mw/Mn (PDI)
62.0-b-33.0	1.03

Synthesis Procedure:

Poly(2-vinyl pyridine-b-methyl methacrylate) is synthesized by living anionic polymerization with sequence addition of 2-vinyl pyridine followed by methyl methacrylate.

Characterization:

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

Thermal analysis:

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

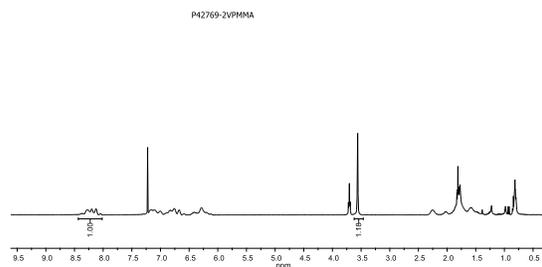
Thermal analysis results at a glance:

Sample	T _g (°C)
2VP (M _n =30k)	81
MMA (M _n =237k)	123
2VP block in sample	93
MMA block in sample	126

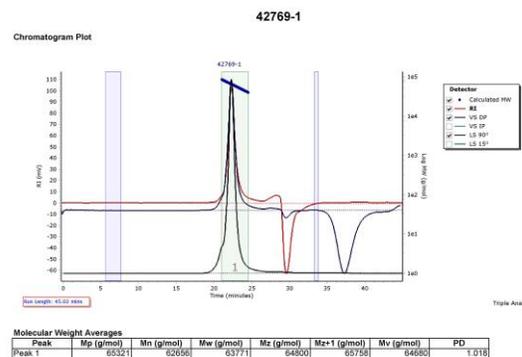
Solubility:

Poly(2-vinyl pyridine-b-methyl methacrylate) is soluble in THF, CHCl₃ and dioxane.

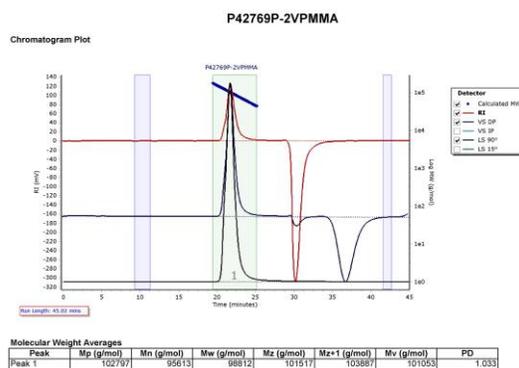
¹H-NMR spectrum of the product:



SEC chromatogram of 2VP block:



SEC chromatogram of the sample:



DSC thermogram for MMA block:

