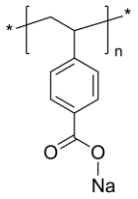
Sample Name:
Poly(4-vinylbenzoic acid sodium salt)

Sample #: **P42645B-VBANa**

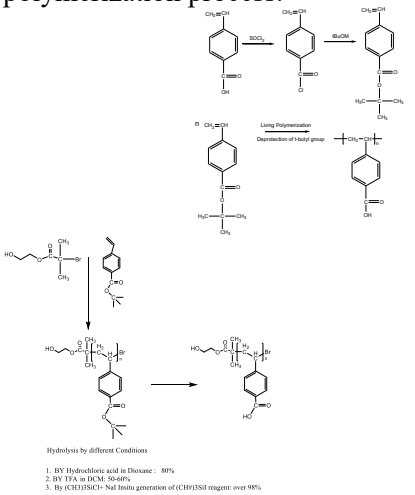
Structure:



Composition:

Mn x 10^3	PDI
26.0	1.37

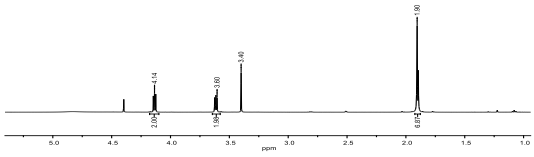
Synthesis Procedure:
The polymer was synthesized by RAFT polymerization process.



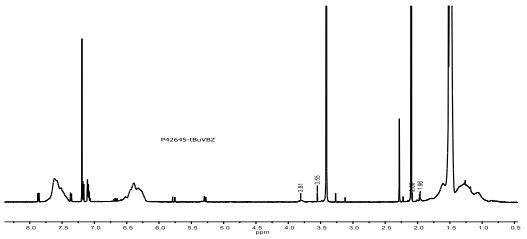
Characterization:
The product was characterized by size exclusion chromatography (SEC) and ^{1}H NMR and FT-IR data analysis.

Solubility:
Polymer is soluble in DMF, MeOH, and EtOH. It precipitates from water and hexanes.

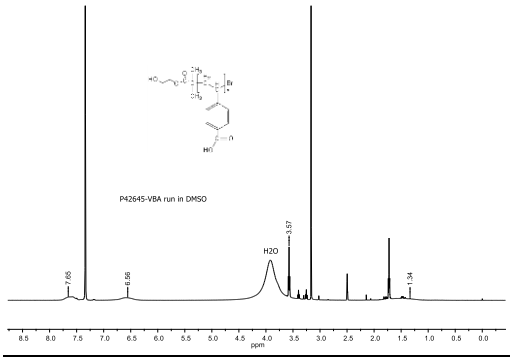
^{1}H-NMR spectrum of ATRP (400 MHz, $CDCl_3$):



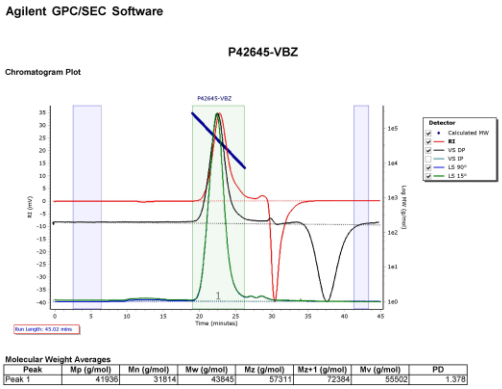
^{1}H-NMR spectrum of the polymer (in $CDCl_3$):



^{1}H-NMR spectrum of the polymer (in DMSO):



SEC elugram of Homopolymer poly(t-butyl vinylbenzoate):



After hydrolysis of tert.Butyl ester (Mn 31,800) Mn of Poly Vinyl benzoic acid : Mn 23,000
Its sodium salt Mn: 26,000

FTIR spectrum of the product: