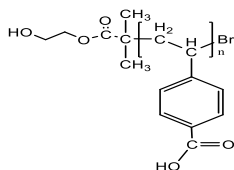


Sample Name: Poly(4-vinyl benzoic acid)

Sample #: P42645-VBA by ATRP

Structure:

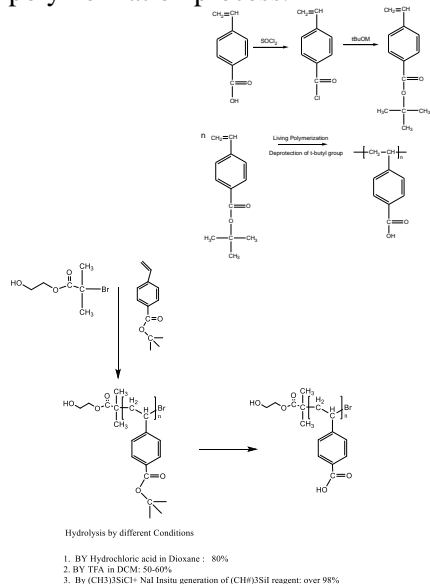


Composition:

Mn x 10 ³	PDI
23.0	1.37

Synthesis Procedure:

The polymer was synthesized by RAFT polymerization process.



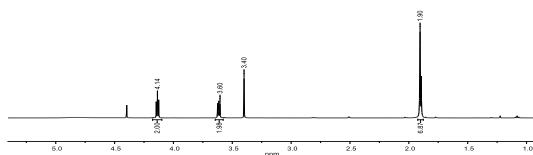
Characterization:

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

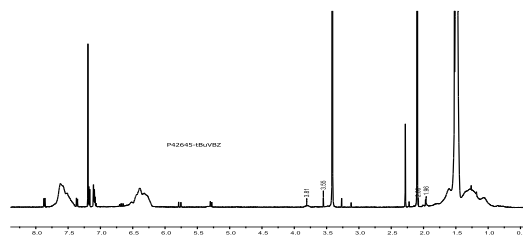
Solubility:

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

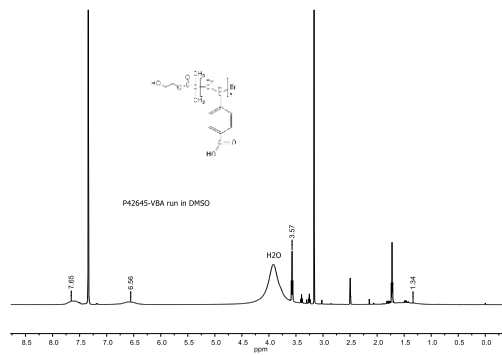
¹H-NMR spectrum of ATRP (400 MHz, CDCl₃):



¹H-NMR spectrum of the polymer (in CDCl₃):

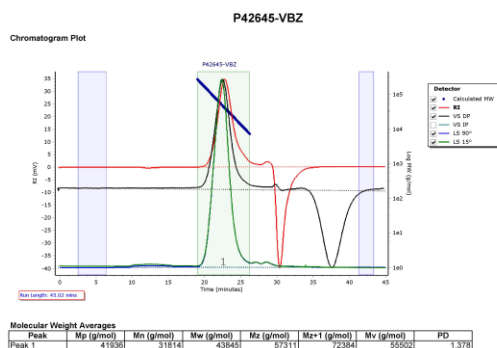


¹H-NMR spectrum of the polymer (in DMSO):



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

Agilent GPC/SEC Software



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

FTIR spectrum of the product:

