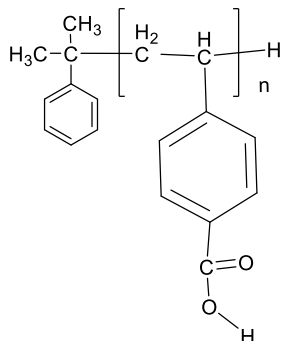


Sample Name: Poly(4-vinyl benzoic acid)

Sample #: P43044F1-VBA

Structure:



Composition:

Mn x 10 ³	PDI
4.1	1.06
Traces of unreacted monomer	> 0.1%
Presence of unhydrolyzed tert Butyl ester	>1%

Synthesis Procedure:

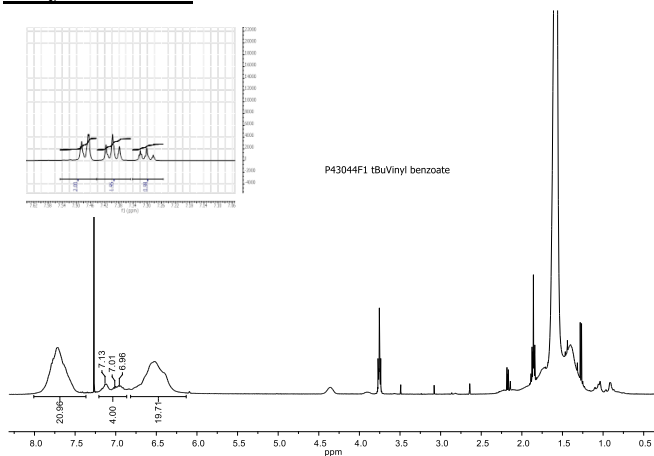
Using cumyl potassium initiator and polymerization at -95 °C.

Poly(4-vinyl benzoic acid) is synthesized by making the 4-t-butyl vinyl Benzoate monomer followed by polymerization and hydrolysis of the t- butoxy group.

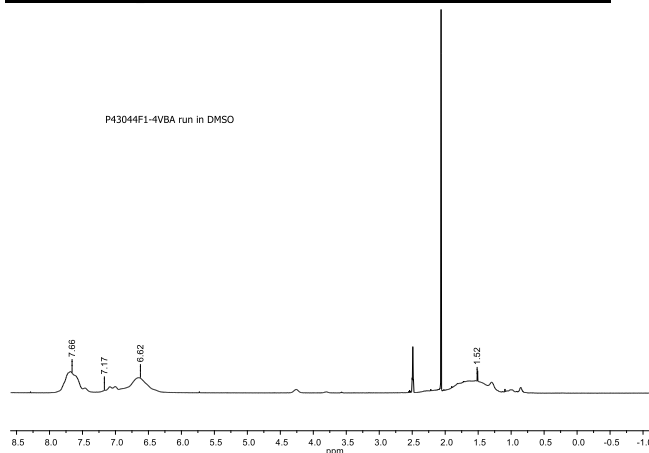
Characterization:

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

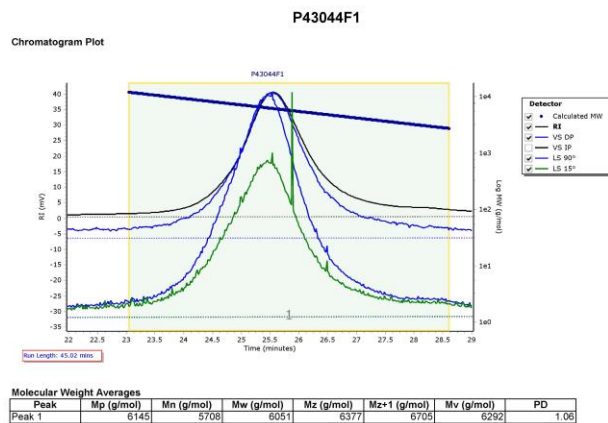
¹H-NMR spectrum of Poly 4-tert.butyl Vinylbenzoate:



¹H-NMR spectrum of Poly 4-Vinyl Benzoic acid:



SEC elugram of Homopolymer:



After Hydrolysis of ester to COOH Mn:4,100

FT-IR spectrum:

