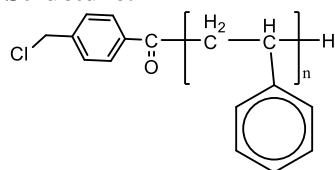


Sample Name: Poly(styrene), α -Benzyl Chloride terminated

Sample #: P42265B-SBzCl

Structure:

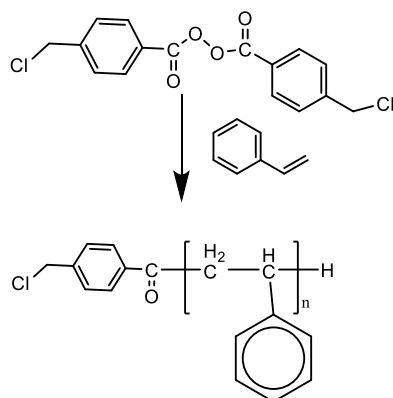


Composition:

$M_n \times 10^3$	PDI
140.0	1.5

Synthesis Procedure:

The following reaction scheme shows how the product was prepared:



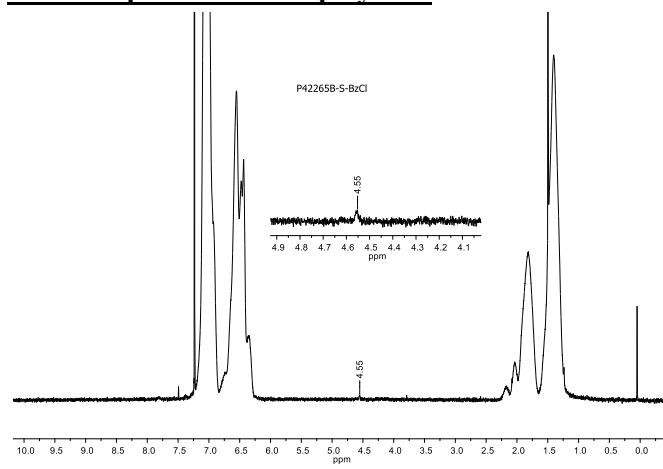
Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. Polymer functionality was verified by FTIR/H NMR depending on the molecular weights. Furthermore, the quantitative yield of the end functionalization was also proven in the extinction of the polymer in the ATRP process to synthesize different di-block copolymers.

Solubility:

Polymer is soluble in THF, CHCl_3 and toluene. It is precipitated out from methanol, ethanol, hexane and ether.

H NMR spectrum of the polymer:

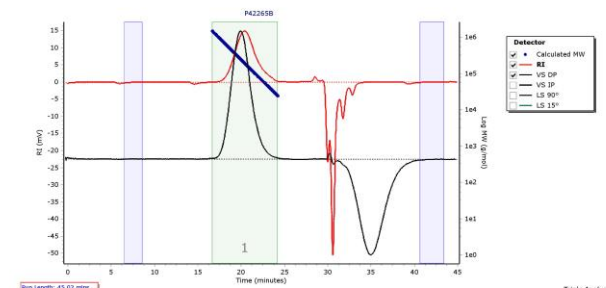


SEC elugram of the Sample:

Agilent GPC/SEC Software

P42265B

Chromatogram Plot



Molecular Weight Averages

Peak	M_p (g/mol)	M_n (g/mol)	M_w (g/mol)	M_z (g/mol)	M_z+1 (g/mol)	M_v (g/mol)	PD
Peak 1	195650	140304	214908	308183	424612	291955	1.532