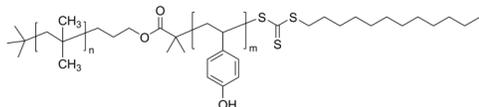


Sample Name:
Poly (isobutylene-b-4-hydroxy Styrene)

Sample #: P42371-Ib4OHS

Structure:

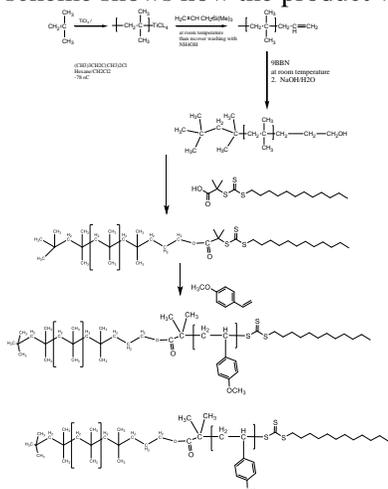


Composition:

Mn × 10 ³ Ib-b-4OHS	Mw/Mn (PDI)
8.5-b-39.0	1.22

Synthesis Procedure:

The polymer was synthesized by Cationic and RAFT polymerization process. The following reaction scheme shows how the product was prepared:



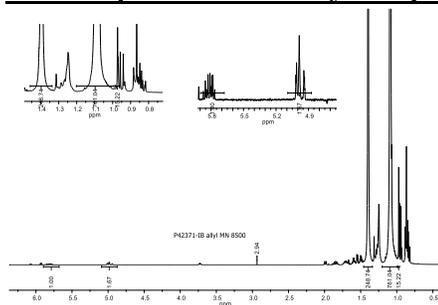
Characterization:

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

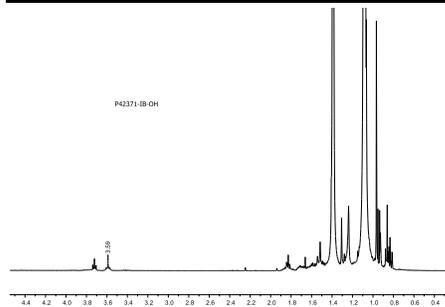
Solubility:

Poly (isobutylene-b-4-Hydroxy styrene) is soluble in a mixture of THF-Methanol.

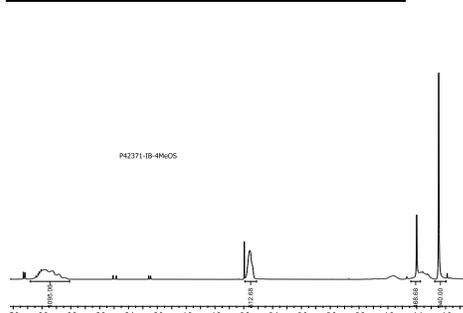
HNMR spectrum of IB allyl sample:



HNMR spectrum of IB-OH sample:

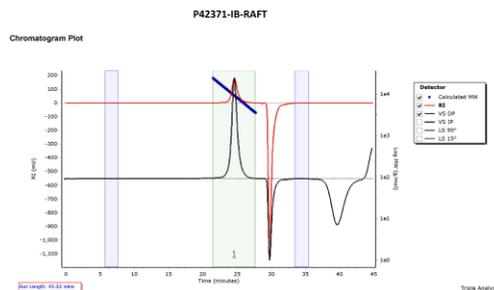


HNMR spectrum of IB-4MeOS:



SEC profile of the PIB-RAFT macroinitiator

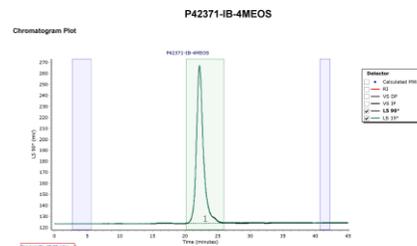
Agilent GPC/SEC Software



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	9202	8729	9031	9339	9694	9256	1.035

SEC profile of the IB-4MeOS:

Agilent GPC/SEC Software



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	73015	60005	63028	72375	78905	71051	1.216

Mn 8,500-b-44,000
 After Hydrolysis of Methoxy to hydroxy:
 Mn 8,500-b-39,000