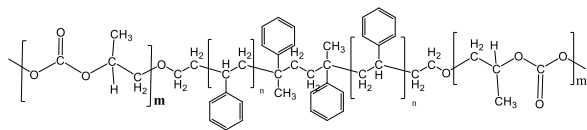


Sample Name:

Poly(propylene carbonate)-b-poly(styrene)-b-poly(propylene carbonate)

Sample #: **P43109B-PPCSPPC**

Structure:

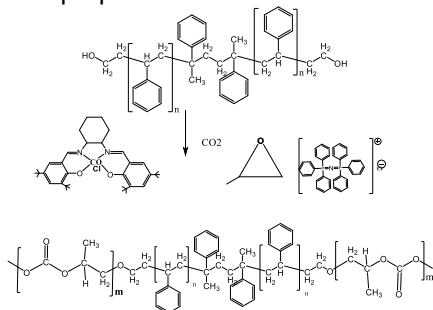


Composition:

Mn x 10 ³ PPC-b-S-PPC	PDI
5.0-10.0-5.0	1.11

Synthesis Procedure:

The following reaction scheme shows how the product was prepared:



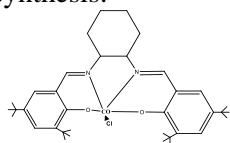
Characterization:

Polymer analyzed by size exclusion chromatography (SEC) and by ¹H-NMR data analysis.

Solubility:

The polymer is soluble in THF, toluene, and CHCl₃.

Purification of the polymer to remove homopolycarbonate fraction generated by Ionic polymerization of Propylene oxide by the following catalyst : (R,R)-N,N'-Bis(3,5-di-tert-butylsalicylidene)-1,2-cyclohexanediaminocobalt(II) chloride used in the synthesis:

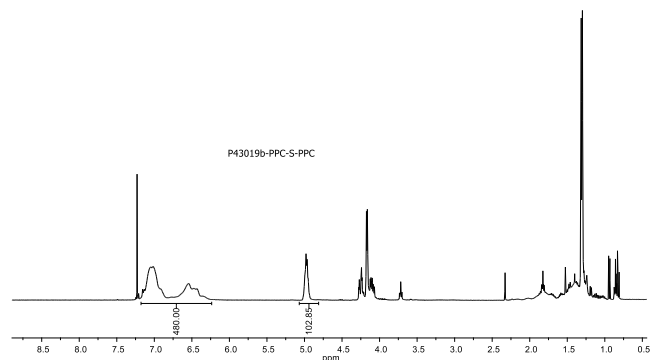


Product was purified to remove:

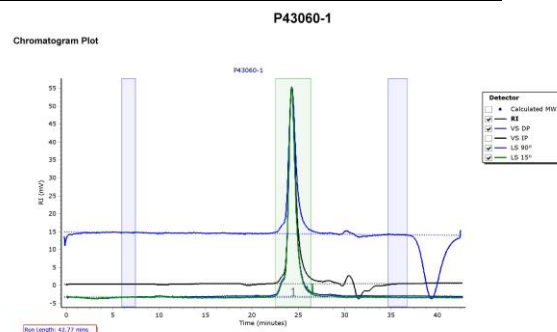
1. Homopolystyrene if any
2. Homopoly propylene carbonate

Using solvent /non solvent mixture and the purification followed by SEC profile.

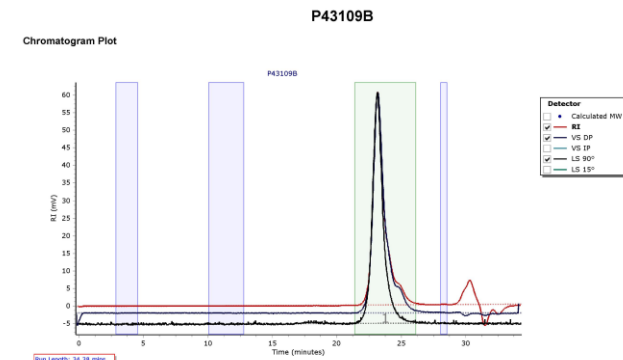
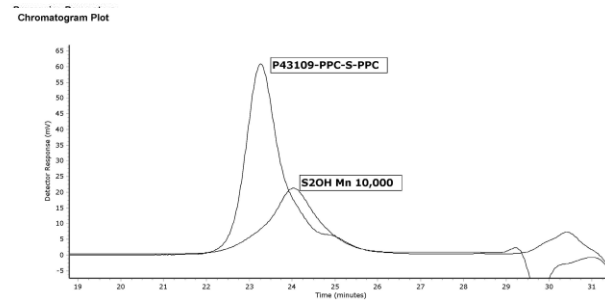
¹H-NMR Spectrum of the product:



SEC elugram of the polymer-S2OH used



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	10662	10122	10308	10484	10653	10437	1.018



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	23862	19492	21774	23545	25003	22821	1.117