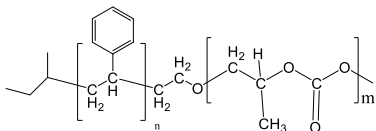


Sample Name:

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

Sample#: **P43068B-SPPC**

**Structure:**

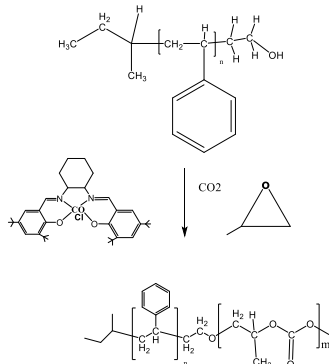


**Composition:**

Mn x 10 <sup>3</sup> S-b-PPC	PDI
11.5-5.0	1.06

**Synthesis Procedure:**

The following reaction scheme shows how the product was prepared:



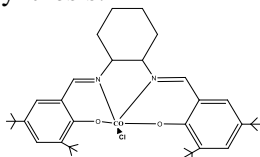
**Characterization:**

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

**Solubility:**

The polymer is soluble in THF, toluene, and CHCl<sub>3</sub>.

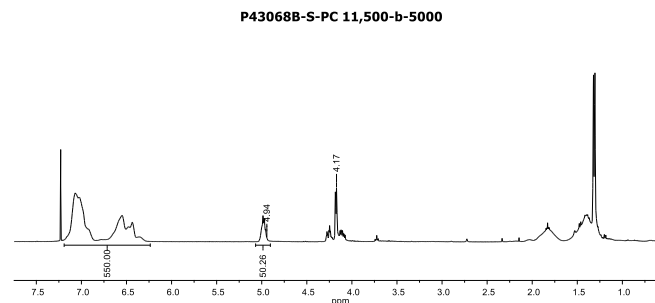
**Purification** of the polymer to remove homopolycarbonate fraction generated by Ionic polymerization of Propylene oxide by the following catalyst : (R,R)-N,N'-Bis(3,5-di-tert-butylsalicylidene)-1,2-cyclohexanediaminocobalt(II) chloride used in the synthesis:



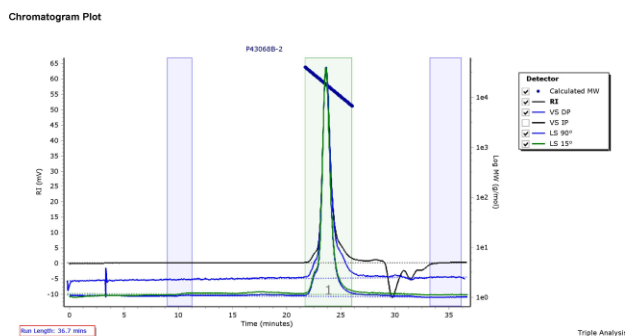
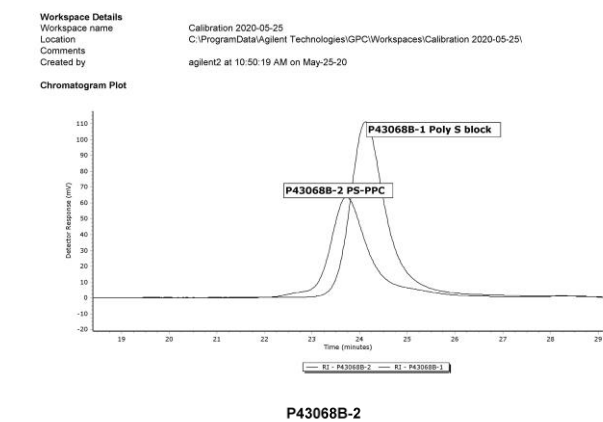
Product was purified to remove:

1. Homopolystyrene if any
  2. Homopoly propylene carbonate
- Using solvent /non solvent mixture and the purification followed by SEC profile.

**<sup>1</sup>H-NMR Spectrum of the product:**



**SEC elugram of the polymer:**



Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	18409	18546	17608	18548	18458	18112	1.064