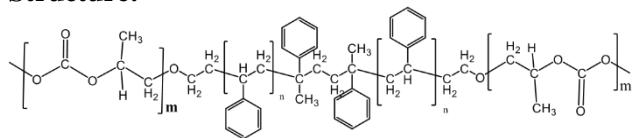


Sample Name:

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

Sample#: **P43070-PPCSPPC**

Structure:

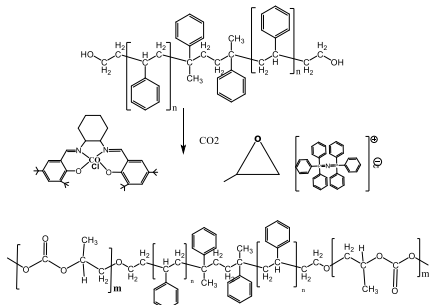


Composition:

Mn x 10 ³ PPC-b-S-b-PPC	PDI
18.5-11.5-18.5	1.05

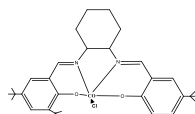
Synthesis Procedure:

The following reaction scheme shows how the product was prepared:



Purification:

The polymer was purified 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.

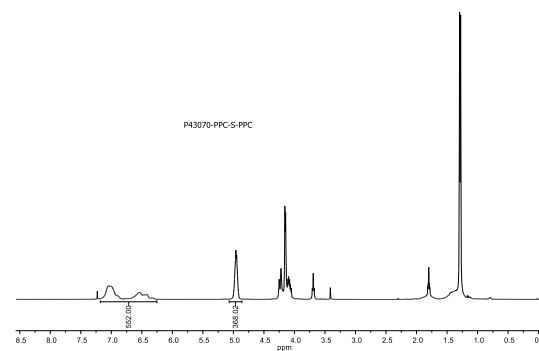
Characterization:

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

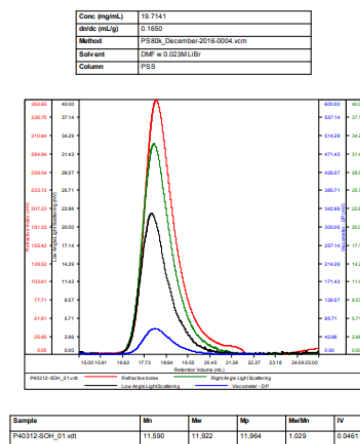
Solubility:

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

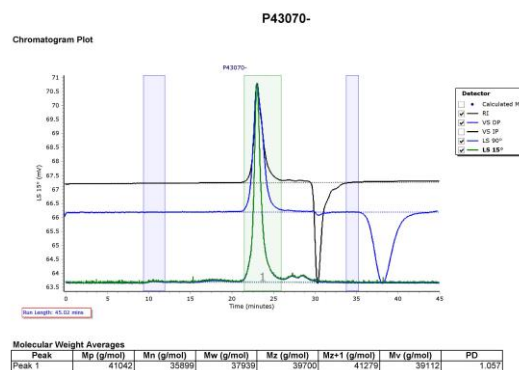
¹H-NMR Spectrum of the product:



SEC elugram of the S2OH sample used:



SEC elugram of the polymer:



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	41042	35999	37939	39700	41279	39112	1.057

