



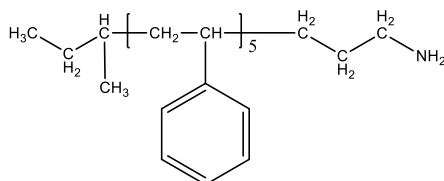
Product Profile

Identification

Product Name: Oligo (Amino Terminated Polystyrene)

Product Lot Number: P43823-SNH2

Chemical Architecture:

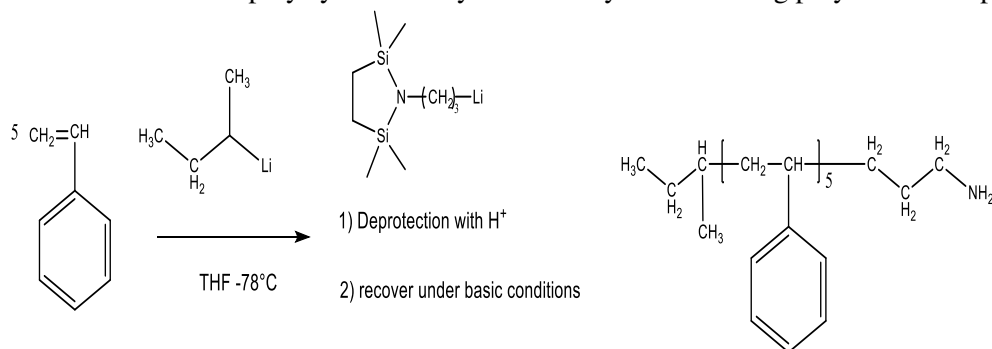


Composition:

Mn (g/mole)	650
Mw (g/mole)	700
Mw/Mn	1.15
DP	6.0

Method of Synthesis

ω -amino terminated polystyrene was synthesized by anionic living polymerization process.



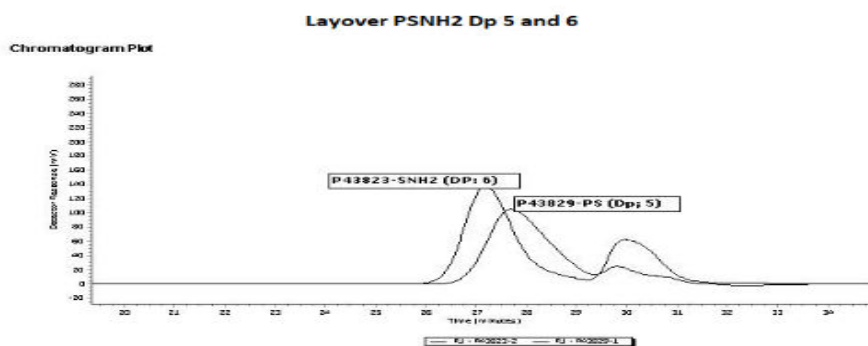
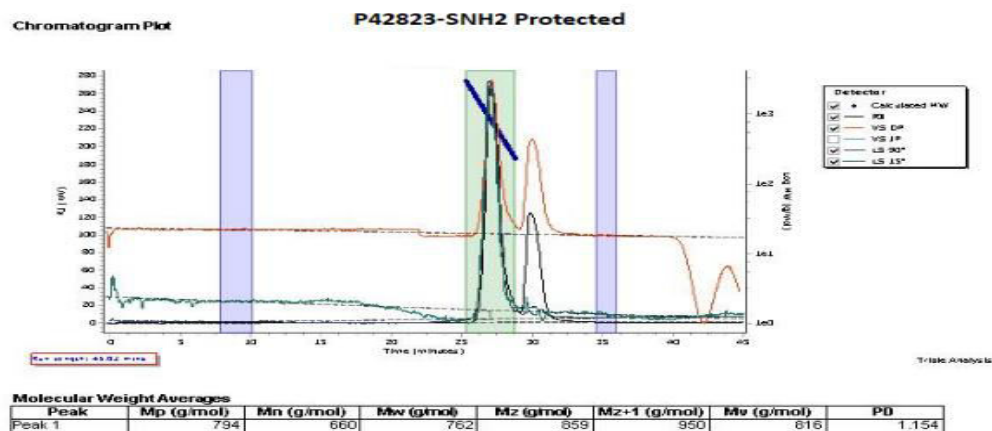
Solubility in different solvents:

THF	√	Methanol	X
CHCl_3	√	Hexane	X
Toluene	√		

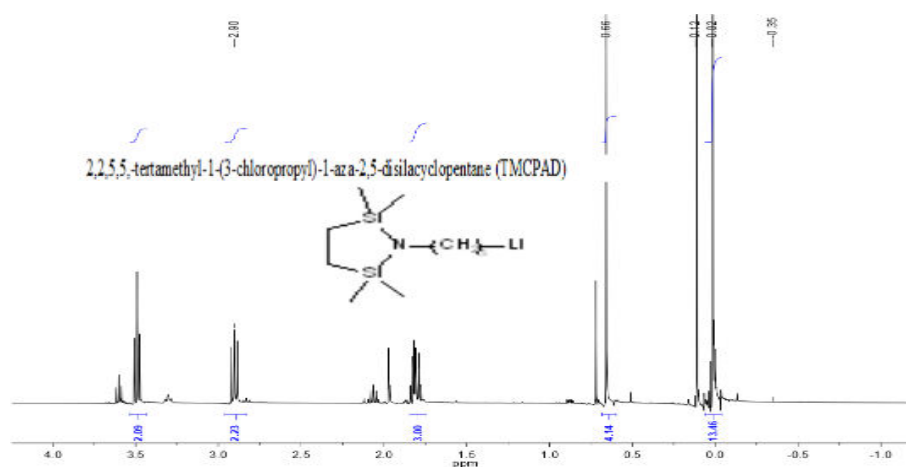


Validation of Architecture

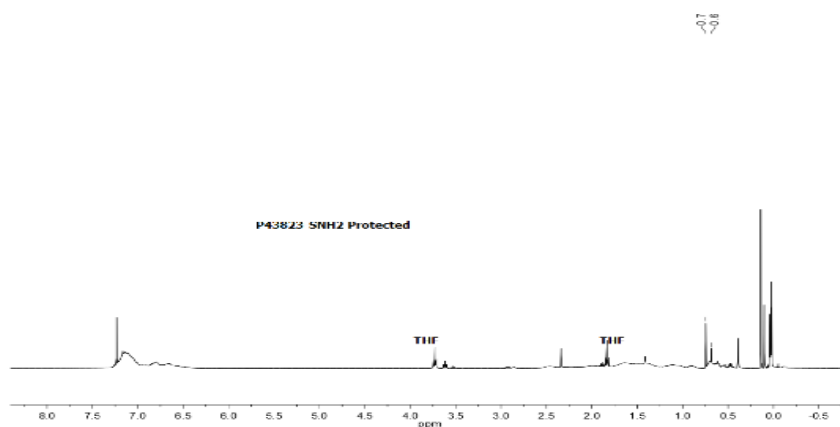
A. Gel Permeation Chromatography (GPC), SEC Profile:



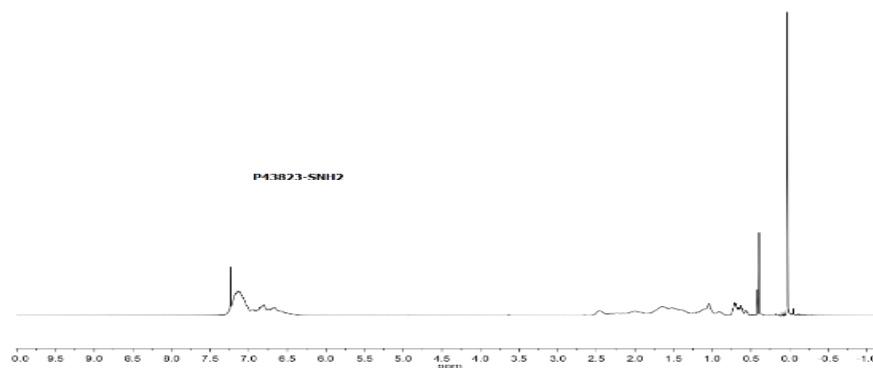
B. ¹H NMR spectrum of TMPCAD:



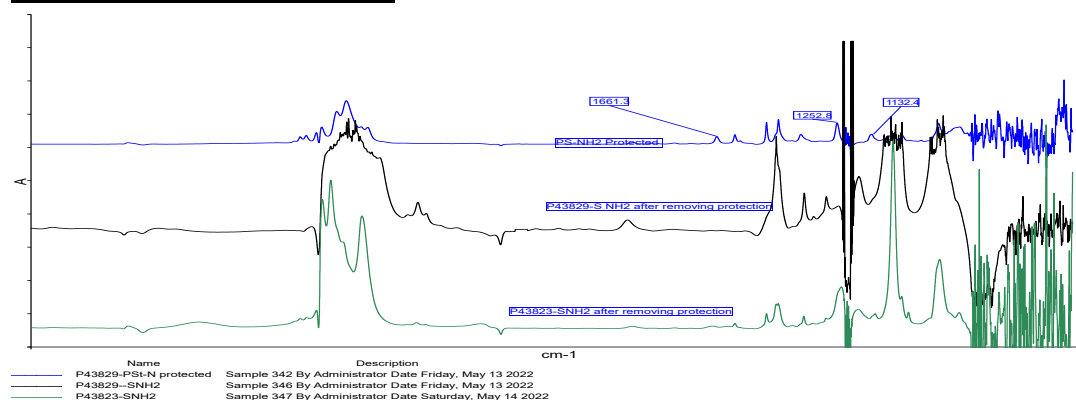
HNMR spectrum of the Protected Sample with TMCPAD:



HNMR spectrum of PSNH2 Sample:



FTIR spectrum of the Sample:



Deprotection of terminal NH2 can be followed by FTIR. The characteristic absorbance at 1249 cm⁻¹ and 1130 cm⁻¹, for TMCPAD can be found in Polystyrene with NH2 Protected moiety which are absent in polystyrene. After removing TMCPAD these absorbances are absent.