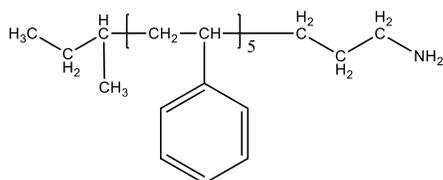


Sample Name:
Oligo(Amino Terminated Polystyrene)

Sample #: P43829-SNH2

Structure:



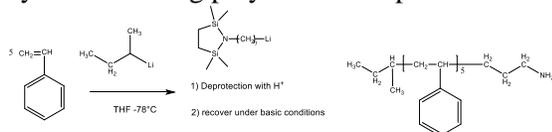
Composition:

Mn × 10³	PDI
0.55	1.04

Dp: 5

Synthesis Procedure:

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

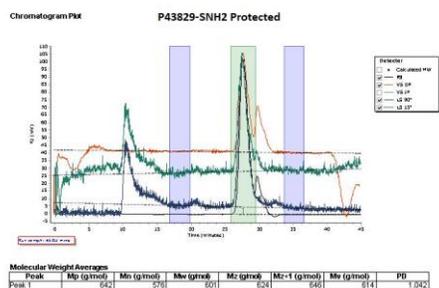


Characterization:

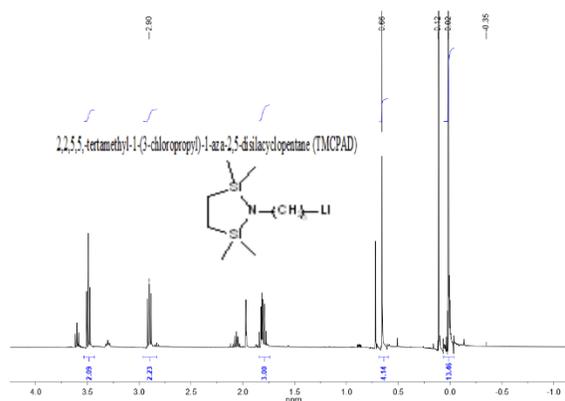
The product was characterized by size exclusion chromatography (SEC), ¹H NMR data analysis, and FTIR for the validation of the architecture. Synthesis of 2,2,5,5-tetramethyl-1-(3-chloropropyl)-1-aza-2,5-disilacyclopentane (TMCPAD) and details of polymerization are reported in :

Sunil K. Varshney, Zhengji Song, Jian Xin Zhang, Robert Jerome
J. Apply. Polym. Sci. 07 April 2006

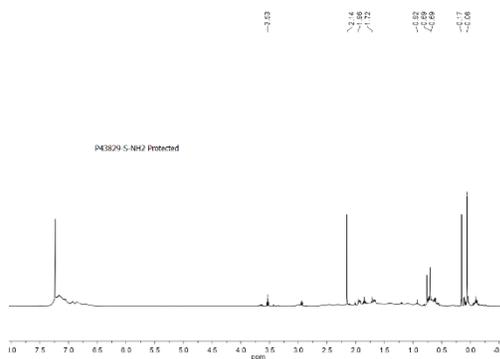
SEC elugram of the Sample:



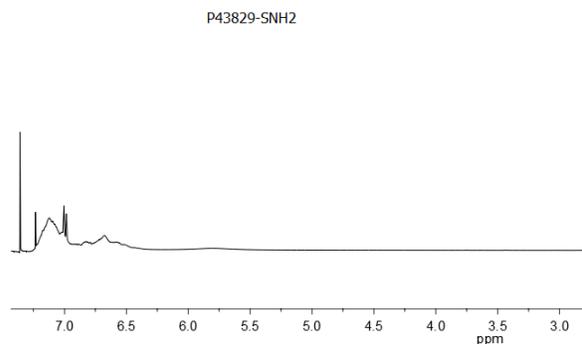
HNMR spectrum of TMCPAD:



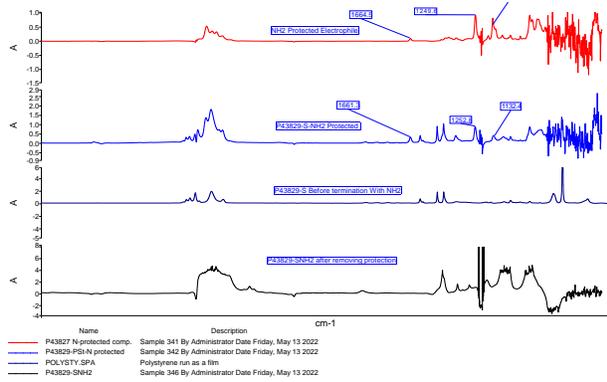
HNMR spectrum of the Protected Sample with TMCPAD:



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.