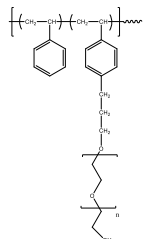


Sample Name: Poly(styrene)-graft-poly (ethylene oxide), PEO is hydroxy-terminated

Sample #: P41755-SEOcomb

Structure:

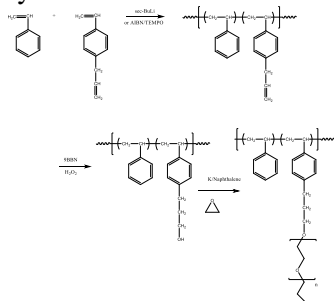


Composition:

Mn x 10 ³ (Main Chain)	Mn x 10 ³ (Graft Chain)	Mn x 10 ³ (Total Chain)	Mw/Mn (Total)
6.0	6.0	42.0	1.16
PEO = 6 branches			

Synthesis Procedure:

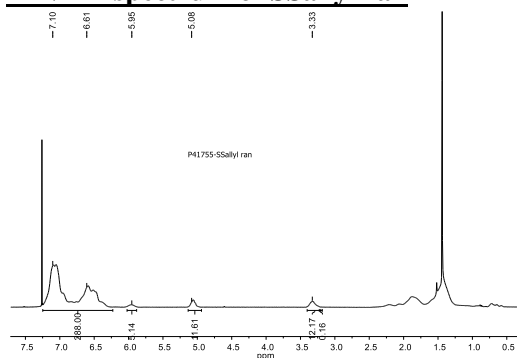
Polystyrene-g-poly (ethylene oxide) is synthesized by polymerization of ethylene oxide on the polystyrene bearing hydroxyl functions. The brief synthetic route is illustrated as following scheme.



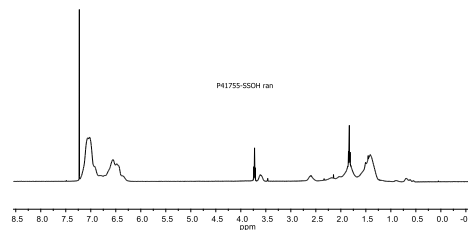
Characterization:

The molecular weight and polydispersity index (PDI) of polymers are obtained by size exclusion chromatography (SEC). The composition of grafting polymer is determined by NMR.

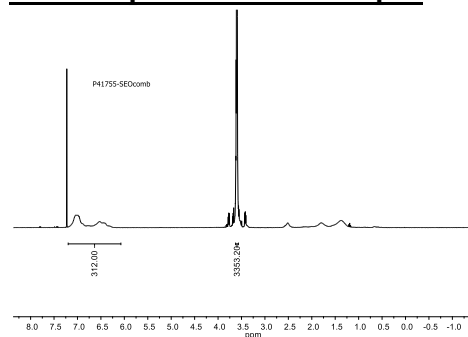
H NMR spectrum of SSallyl ran



H NMR spectrum of SSButanol:

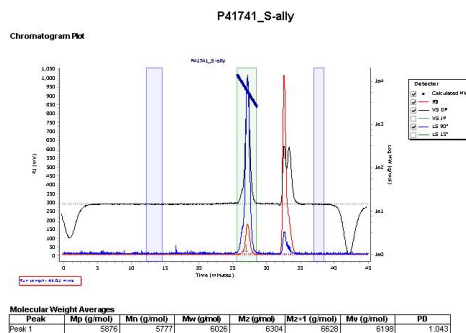


H NMR spectrum of the Sample:



SEC of Polymer SSallyl ran Lot P41741:

Agilent GPC/SEC Software



SEC elugram of the Sample:

Agilent GPC/SEC Software

