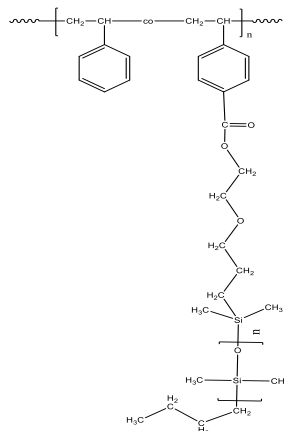


Sample Name:

**Poly(styrene)-graft-poly (dimethyl siloxane),
grafting on backbone**

Sample #: **P42482-SDMScomb**

Structure:



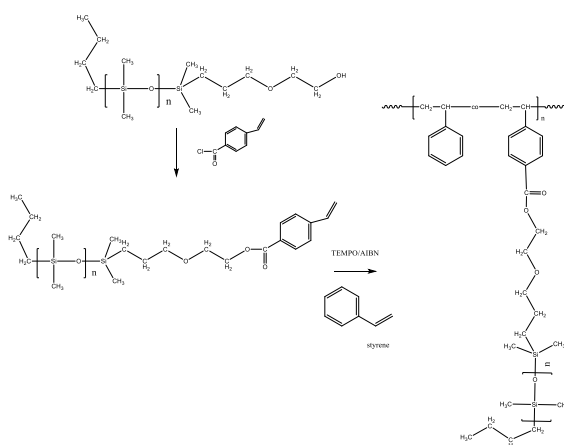
Composition:

$\frac{Mn \times 10^3}{Total}$	$\frac{Mn \times 10^3}{PDMS \text{ macromonomer}}$	Mw/Mn Comb	# of PDMS Branches
35.0	10.0	1.15	1

styrene mole%=75.0

Synthesis:

The following reaction scheme shows how the product was prepared:



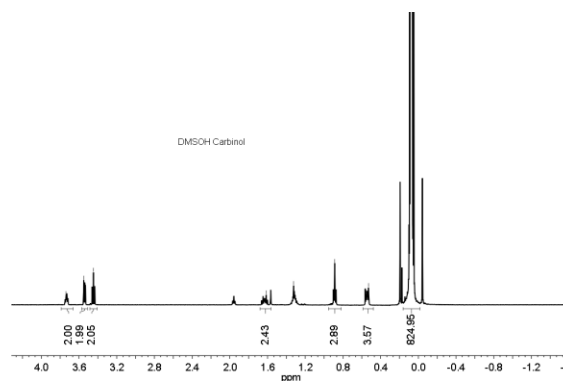
Characterization:

The product was characterized by size exclusion chromatography (SEC) and 1H NMR.

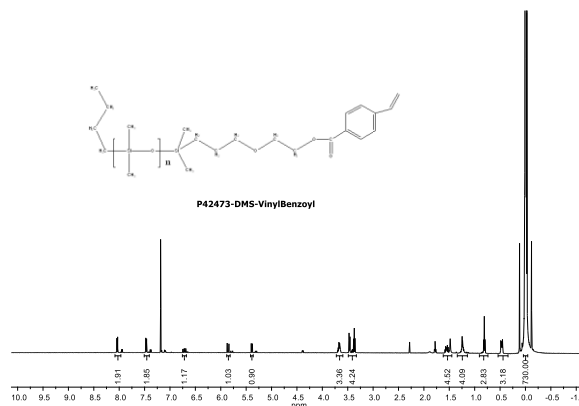
Solubility:

Polymer is soluble in THF, chloroform and toluene. It precipitates from methanol.

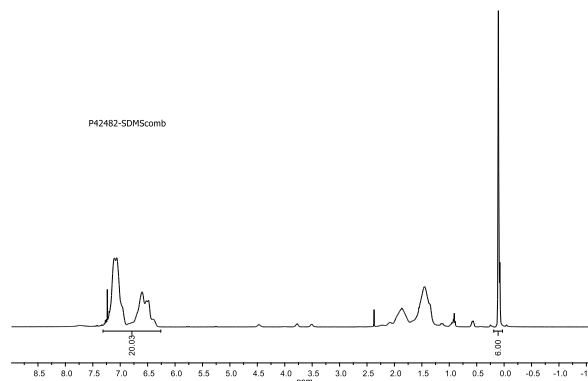
1H NMR spectrum of DMSOH Carbinol:



**1H NMR spectrum of PDMS Macromonomer used
in the synthesis: Lot# P42473-DMS-VinylBenzoyl
Mn of 10,000**

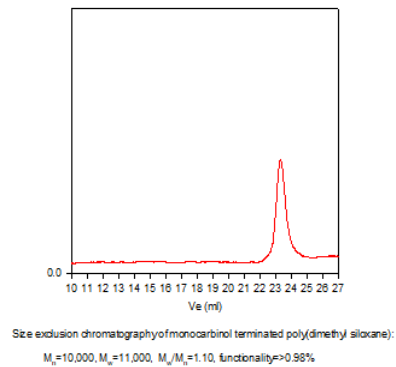


1H NMR spectrum of the comb:

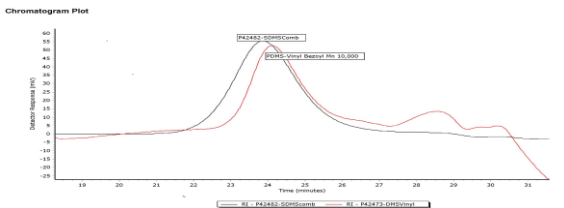


SEC elugram of P42473-DMS-Carbinol:

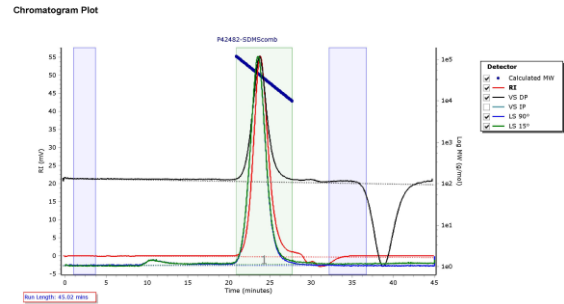
P42473-DMS-Carbinol



SEC elugram of the Sample:



P42482-SDMScomb



Molecular Weight Averages

Peak	M_p (g/mol)	M_n (g/mol)	M_w (g/mol)	M_z (g/mol)	M_{z+1} (g/mol)	M_v (g/mol)	PD
Peak 1	40778	35385	40701	45910	51319	44561	1.15