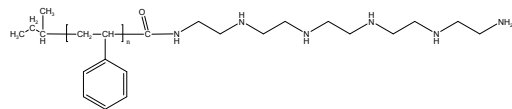


Sample Name:

**Pentaethyl Hexamine Terminated  
Polystyrene**

Sample #: **P18042A-SPEHA**

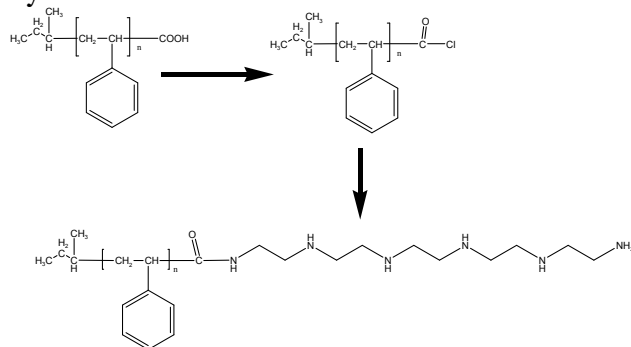
**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
4.8	1.13
T <sub>g</sub> (°C)	105
Functionality %	98

**Synthesis Procedure:**



**Characterization:**

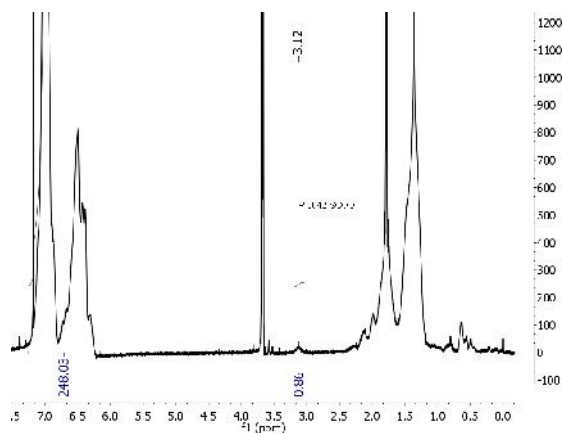
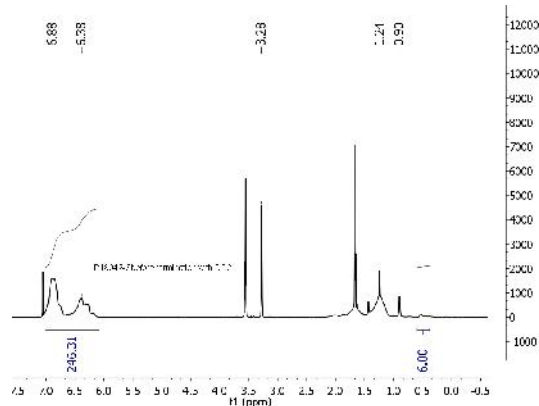
The molecular weight and polydispersity index of this polymer were determined before addition of the CO<sub>2</sub>H function, by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. Polymer functionality was determined by titration with NaOH using phenolphthalein as the indicator.

**Thermal analysis:**

Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature (T<sub>g</sub>) has been considered.

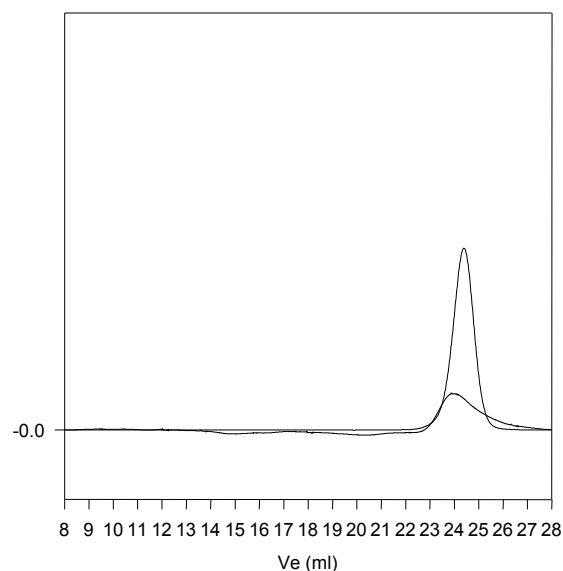
**Solubility:**

Polymer is soluble in toluene, THF, CHCl<sub>3</sub> and can be precipitated in water and cold methanol.



**SEC of Sample:**

**P18042A-SPEHA**



Size exclusion chromatography of monocarboxy terminated polystyrene (before adding Co<sub>2</sub>).

M<sub>n</sub>=4800, M<sub>w</sub>=5500, PI=1.13, functionality>99%

After reacting with PentamethyleneHexamine

**DSC thermogram for the sample:**

