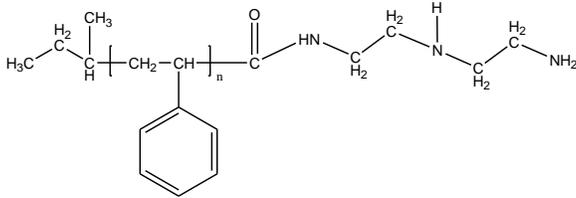


Sample Name:

**Poly(styrene),  $\omega$ -(diethylene triamine)-terminated**

Sample #: **P18083CC-SDTA**

**Structure:**



**Composition:**

$M_n \times 10^3$	PDI
0.9	1.25
Functionality %	98

**Synthesis Procedure:**

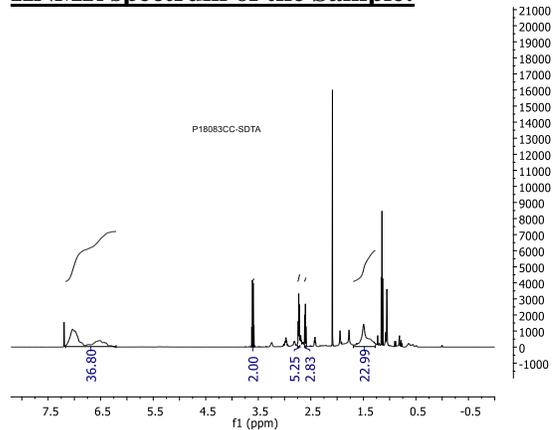
The polymer is prepared by anionic polymerization process.

**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.

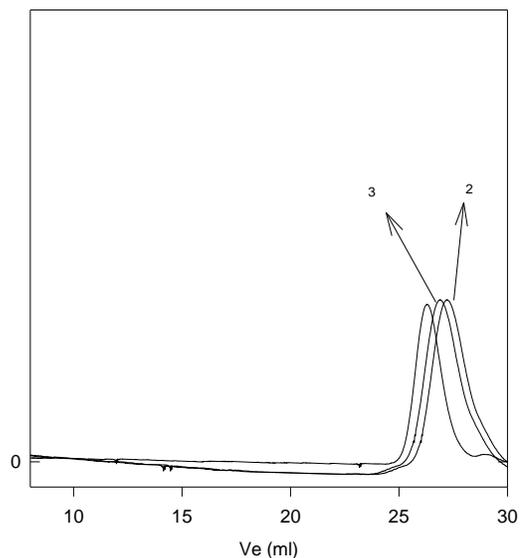
**Solubility:** Polymer is soluble in toluene, THF, CHCl<sub>3</sub> and can be precipitated in water and cold methanol.

**HNMR spectrum of the Sample:**



**SEC profile of Sample:**

**P18083CC-SDTA**



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

$M_n=900$ ,  $M_w=1,200$  PI=1.25 functionality >95%

2. After attaching COOH the elution retarded
3. After attached diethylene triamine