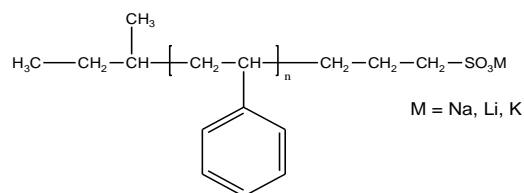


Sample Name:

**Sulfonic Acid Sodium Salt Terminated
Polystyrene**

Sample #: P2265-SSO3Na

Structure:



Composition:

$\text{Mn} \times 10^3$	PDI
0.55	1.05

Synthesis Procedure:

Sulfonic acid functionalized polystyrene was prepared by living anionic polymerization of styrene followed by termination with dried propansultone. Salts of this polymer were prepared by neutralization with the base solution.

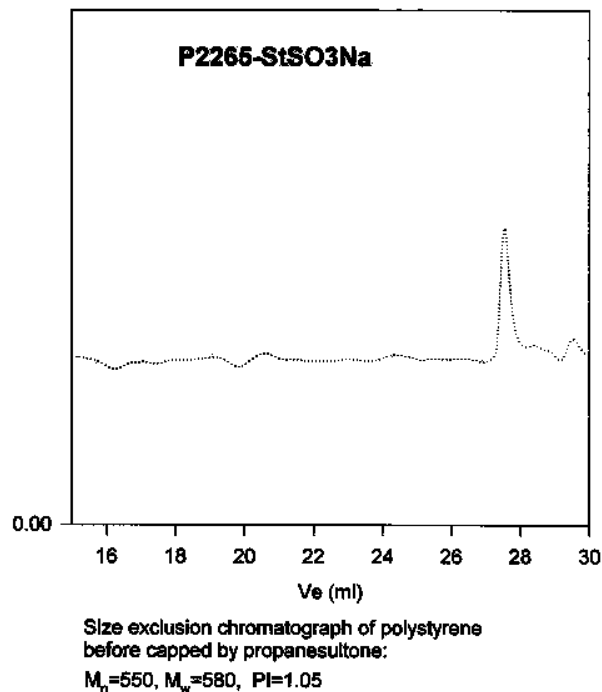
Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. The molecular weights and the polydispersity index for the precursor (pick-out before propansultone addition) polymer were calculated. The functionality of polymer was verified by proton NMR for a low molecular weight and by acid base titration for high molecular weights polymer.

Solubility:

Polymer is soluble in DMF, THF, toluene and CHCl_3 . It precipitates from cold methanol, ethanol, water and hexanes.

SEC of Sample:



^1H NMR of the polymer:

