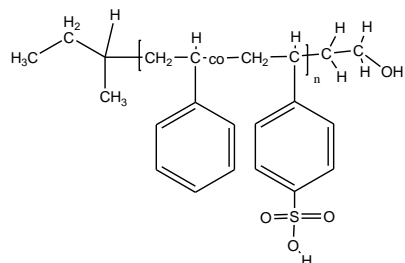


Sample Name:

ω -Hydroxy Terminated ionomer of Polystyrene sulfonic acid

Sample #: **P40904B- SSAOH**

Structure:



Composition: Sulfonation: 20%

Mn x 10 ³	PDI
21.5	1.06

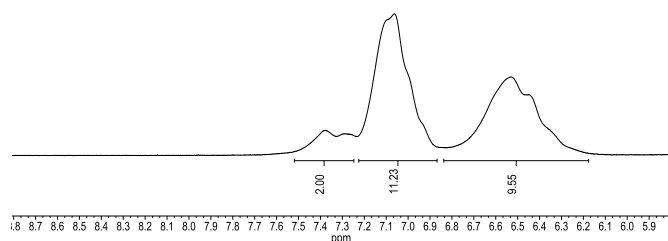
Synthesis:

ω -Hydroxy terminated polystyrene was prepared by anionic living polymerization of styrene in THF followed by termination with ethylene oxide followed by sulfonation.

Characterization:

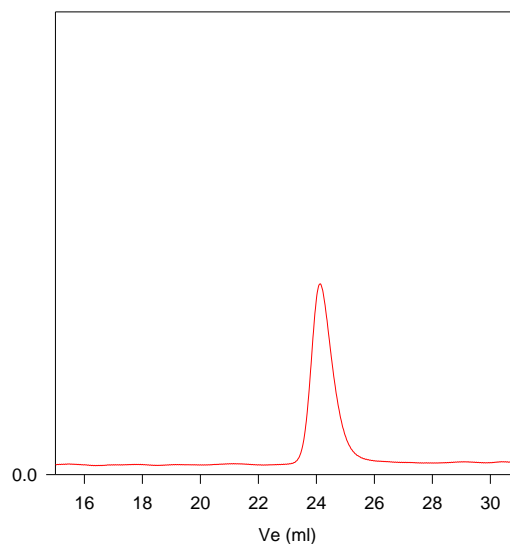
The product was characterized by size exclusion chromatography (SEC) and ¹H NMR.

HNMR spectrum of the Polymer:



SEC elugrame of the Sample:

P40904-SOH for sulfonation



Size exclusion chromatography of ω hydroxy Terminated polystyrene:

M_n=18,500, M_w=19,500, PI=1.06, functionality>99%