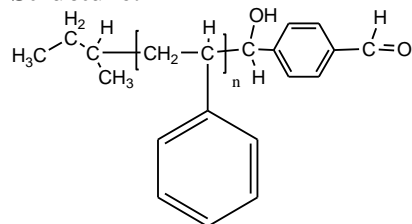


Sample Name:
Benzaldehyde Terminated Polystyrene

Sample #: **P18911-SCHO**

Structure:



Composition:

Mn x 10 ³	PDI	Functionality %
18.0	1.18	>90%

Synthesis Procedure:

Benzaldehyde Terminated Polystyrene was synthesized by anionic polymerization process.

Characterization:

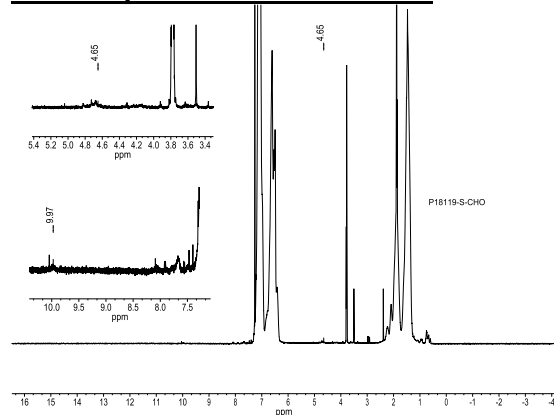
The molecular weight and polydispersity index of this polymer were determined before addition of the CO₂H function, by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. Polymer functionality was determined by titration with NaOH using phenolphthalein as the indicator.

Deprotection of diethyl acetal was performed using trifluoroacetic acid in THF OT HCl/THF at room temperature.

Solubility:

Polymer is soluble in toluene, THF, CHCl₃ and can be precipitated in water, and cold methanol.

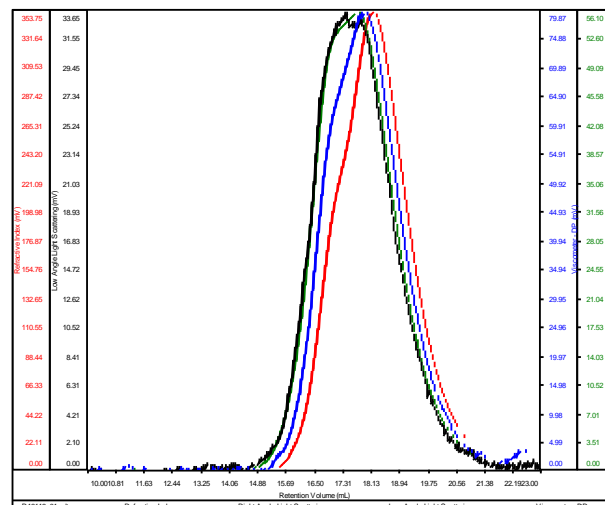
HNMR spectrum of the PS-CHO



SEC elugram of the Sample:

P18119-PS-CHO

Conc	21.1828
dn/dc	0.1650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS100k_2017-Oct11-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18119_01.vdt	17,768	21,004	16,921	1.182	0.1143