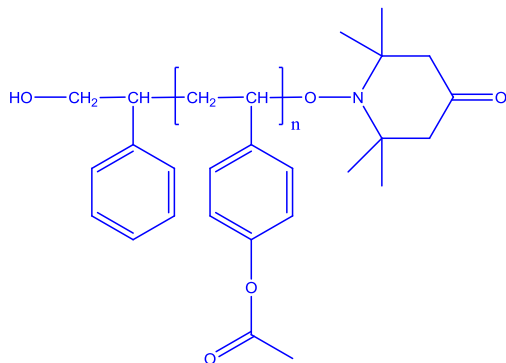


Sample Name:

Poly(4-acetoxystyrene), α -Hydroxyl- ω -Tempo moiety Terminated

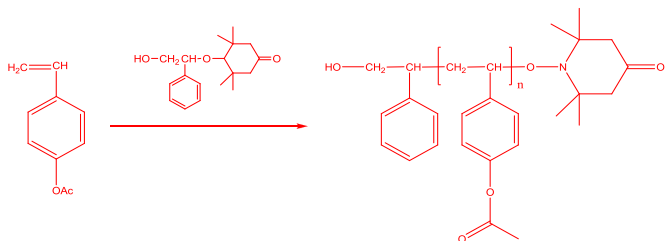
Sample #: P6643-4AcSOHT

Structure:**Composition:**

$M_n \times 10^3$	M_w/M_n (PDI)
26.0	1.25
T_g ($^{\circ}\text{C}$)	105

Synthesis Procedure:

Hydroxy terminated Poly(4-acetoxystyrene) is prepared by stable free radical polymerization at 135°C . The reaction scheme is shown below:

**Characterization:**

An aliquot of the polymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI), the instrument calibrated by Polystyrene standards.

Thermal analysis:

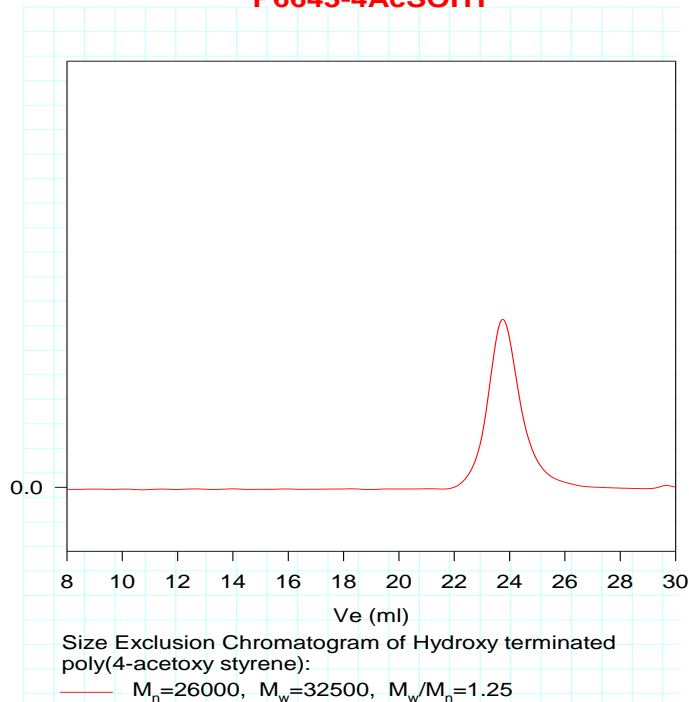
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of $10^{\circ}\text{C}/\text{min}$. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

Solubility:

Poly(4-acetoxystyrene) is soluble in THF, DMF, Toluene and chloroform. Precipitate from methanol and Hexanes.

SEC profile of the random copolymer

P6643-4AcSOHT

**DSC thermogram for the random polymer:**