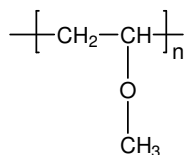


Sample Name: Poly(methyl vinyl ether)

Sample #: P2219 MVE

Structure:

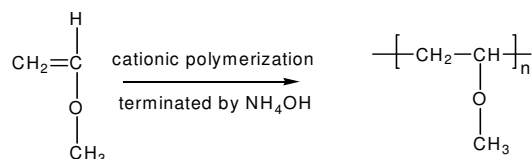
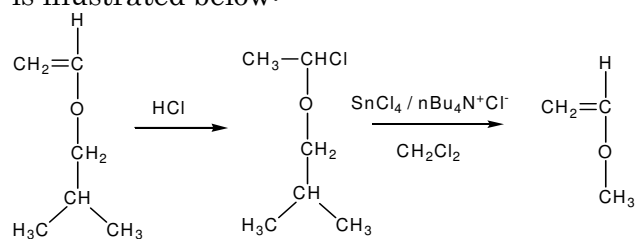


Composition:

$M_n \times 10^3$	PDI
3.8	1.05
$T_g (^{\circ}\text{C})$	-38

Synthesis Procedure:

Poly(methyl vinyl ether) is obtained by synthesis of the monomer followed by living cationic polymerization. The reaction scheme is illustrated below:



Characterization:

The molecular weight and polydispersity index (PDI) of poly(methyl vinyl ether) are obtained by size exclusion chromatography.

Thermal analysis:

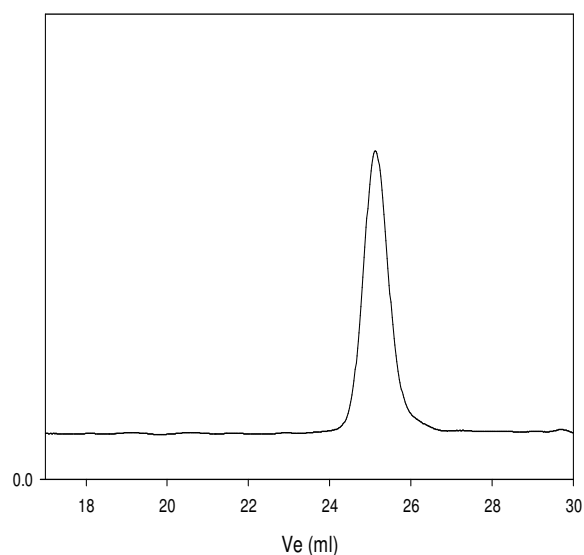
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

Solubility:

Poly(N methyl vinyl ether) is soluble in acetone, methanol.

SEC of homopolymer:

P2219-MVE



Size exclusion chromatography profile of poly(methyl vinyl ether)
 $M_n \approx 3800$; PDI = 1.05 and $M_w \approx 4000$

DSC thermogram for the polymer:

