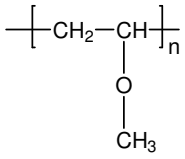
Sample Name: Poly(methyl vinyl ether)
Sample #: P2218 MVE

Structure:

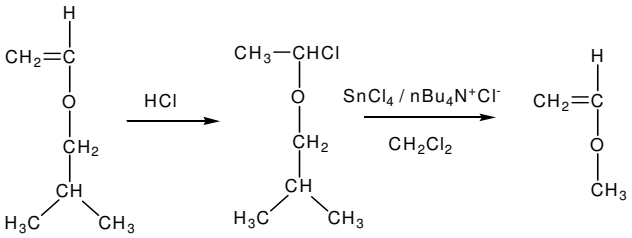


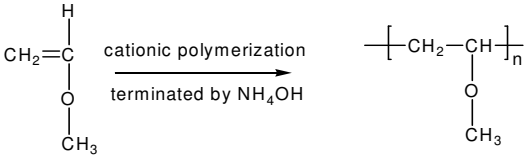
Composition:

Mn × 10^3	PDI
22.1	1.09
T_g (°C)	-21

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.

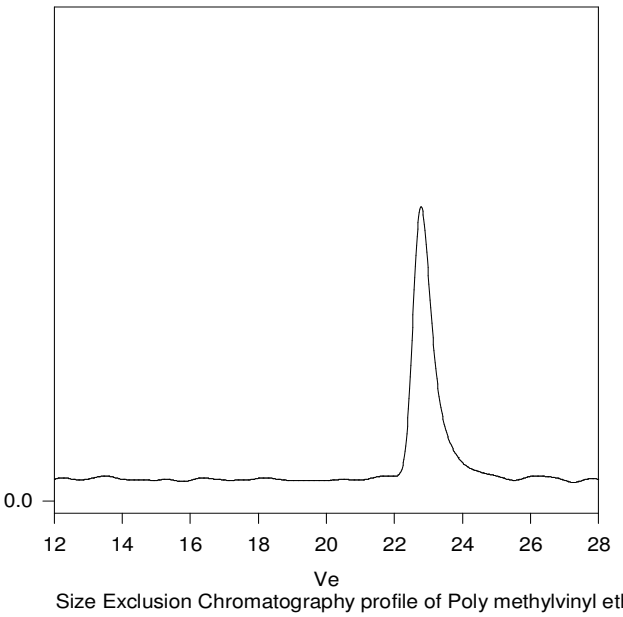
Thermal analysis:

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:



Size Exclusion Chromatography profile of Poly methylvinyl ether:
M_n= 22100, M_w=24000, PI=1.09

DSC thermogram for the polymer: