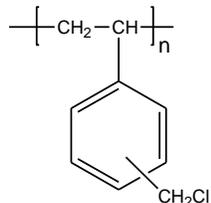


Sample Name: Poly(vinyl benzyl chloride)

Sample #: P6187-VBC

Structure:

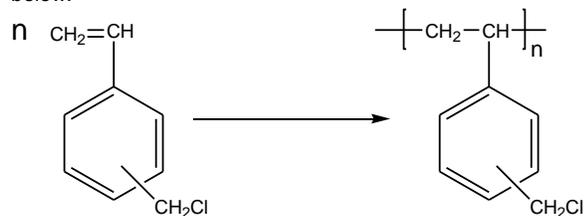


Composition:

$M_n \times 10^3$	PDI
23.0	2.7

Synthesis Procedure:

Poly(vinyl benzyl chloride) is obtained by free radical polymerization of 4-vinyl benzyl chloride or a mixture of 3- and 4-vinyl benzyl chloride. The reaction scheme is shown below.



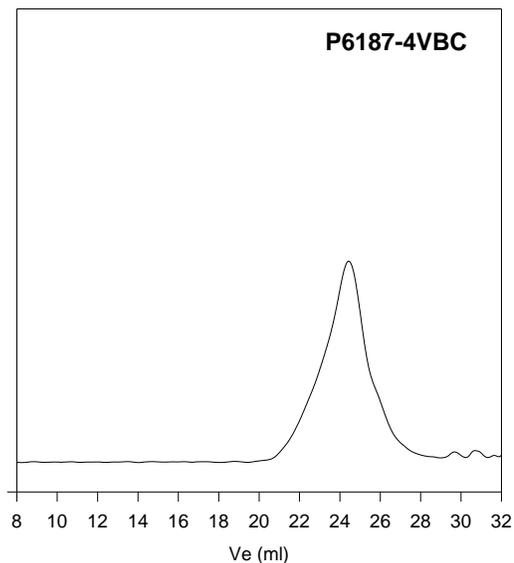
Characterization:

The molecular weight and polydispersity index (PDI) of Poly(vinyl benzyl chloride) are obtained by size exclusion chromatography.

Solubility:

Polymer is soluble in DMF, THF, toluene and CHCl_3 . It precipitates from methanol, ethanol, water and hexanes.

SEC of Homopolymer:



Size Exclusion Chromatography of poly(4-vinyl benzyl chloride):

— $M_n = 23000$, $M_w = 62100$, $M_w/M_n = 2.7$

$R_g = 6.31 \text{ nm}$.

(from Viscotek Triple detector)