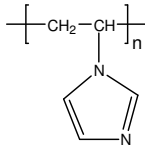


Sample Name:
Poly(N-vinyl imidazole)

Sample #P3904-VIMDZ

Structure:



Composition:

M _n × 10 ³	PDI
3.5	1.5
T _g (°C)	131

Synthesis Procedure:

Polymer is obtained by free radical polymerization using AIBN as free radical initiator.

Characterization:

The molecular weight and polydispersity index (PDI) of polymer is obtained by size exclusion chromatography in aqueous system (water as eluent with 0.1% trifluoroacetic acid and 0.2M NaCl). The columns were calibrated with poly ethylene glycol.

Thermal analysis

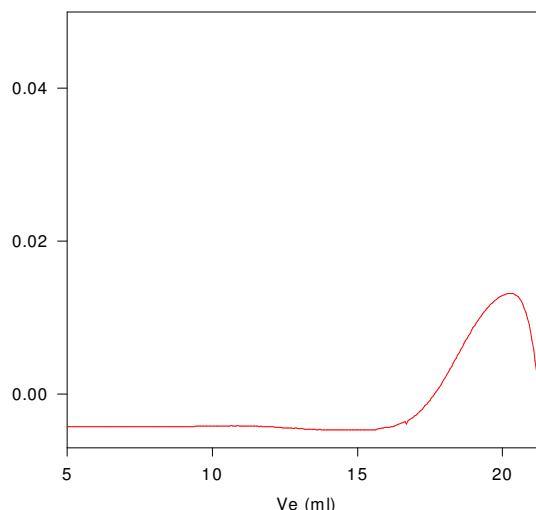
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

Solubility:

Polymer is soluble in water, methanol and precipitated out from hexane, ether.

SEC of Homopolymer:

P3904-VIMDZ



Size exclusion chromatography of poly(vinylimidazole)

with respect to PEO standards:

Eluent: Water with 0.1% trifluoroacetic acid and 0.2M NaCl

P3904-VIMDZ Mn: 3500 Mw: 5200 Mw/Mn: 1.5

DSC thermogram for the polymer:

