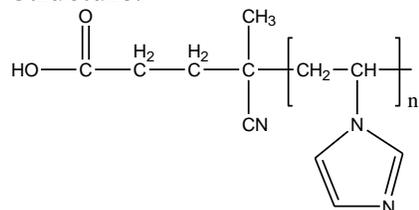


Sample Name:

Carboxy Terminated Poly(N-vinyl imidazole)

Sample #: P6140-VIMDZ-COOH**Structure:****Composition:**

Mn x 10 ³	PDI
13.9	7.9

Synthesis Procedure:

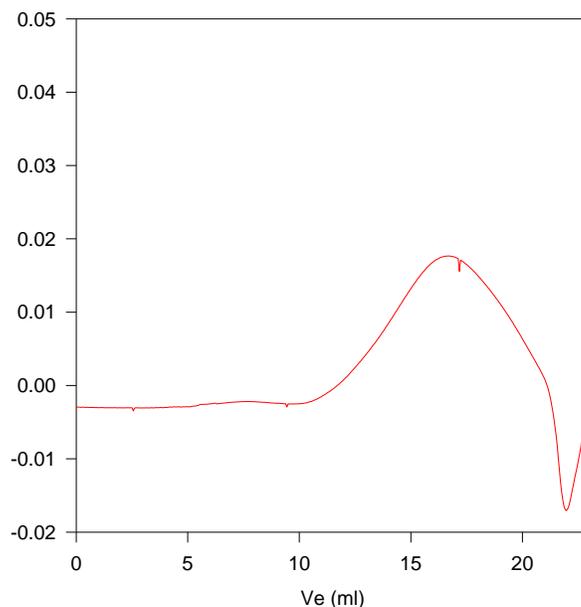
Carboxy Terminated Poly(N-vinylimidazole) was prepared by free radical polymerization of N-vinylimidazole in toluene using 4,4'-azo bis(4-cyanovaleric acid) as initiator.

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). Quaternized poly(2-vinyl pyridine) was used as standards.

Solubility:

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

SEC of Sample:**P6140-VIMDZ-COOH**

Size exclusion chromatography of poly(vinylimidazole) with respect to quaternized poly(2 vinyl pyridine) standards:
 Eluent: Water with 0.1% trifluoroacetic acid and 0.2M NaCl
 $M_n=13900$ $M_w=109400$, $PI=7.90$

