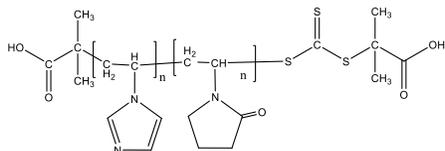


Sample Name: Poly(N-vinyl imidazole)-b-poly(2-pyrrolidone)

Sample#: P43703-VIMDZNVP

Structure:

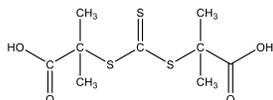


Composition:

Mn × 10 ³ VIMDZ-b-NVP	PDI
113.0-b-400.0	3.8

Synthesis Procedure:

Polymer is obtained by RAFT polymerization process using following RAFT.



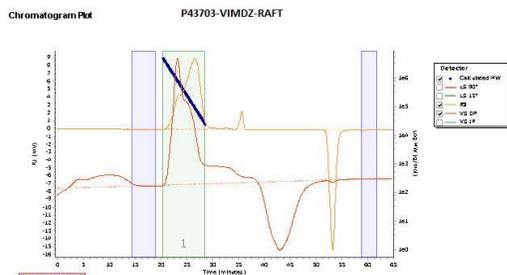
Characterization:

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.

Solubility:

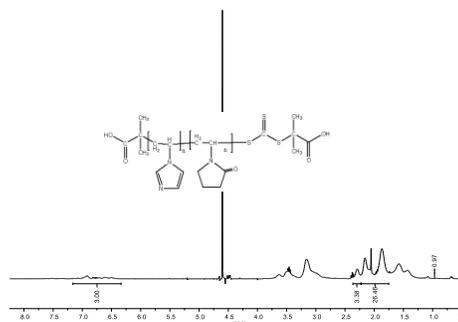
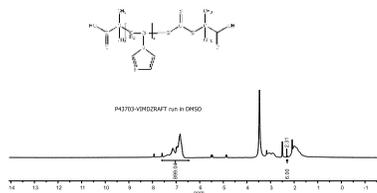
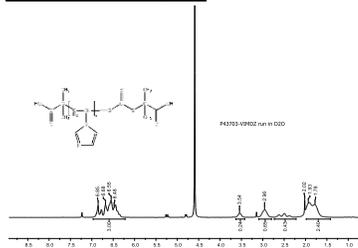
Polymer is soluble in water. It precipitated out from hexane, and ether.

SEC elugram of Homopolymer:



Peak	M _n (g/mol)	M _w (g/mol)	M _v (g/mol)	M _z (g/mol)	M _z +1 (g/mol)	M _v (g/mol)	PD
Peak 1	86583	112527	918655	865841	1403666	711673	2.842

H NMR spectrum of the product in different stages:



FTIR spectrum of the product:

