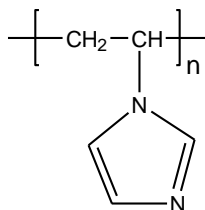


**Sample Name:** Poly(N-vinyl imidazole)

**Sample#:** P44440-VIMDZ

**Structure:**

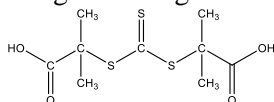


**Composition:**

$M_n \times 10^3$	PDI
65.0	1.77

**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.

**Thermal analysis**

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of  $10^\circ\text{C}/\text{min}$ . 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, and methanol. It precipitated out from hexane, and ether.

**SEC elugram of Homopolymer:**

