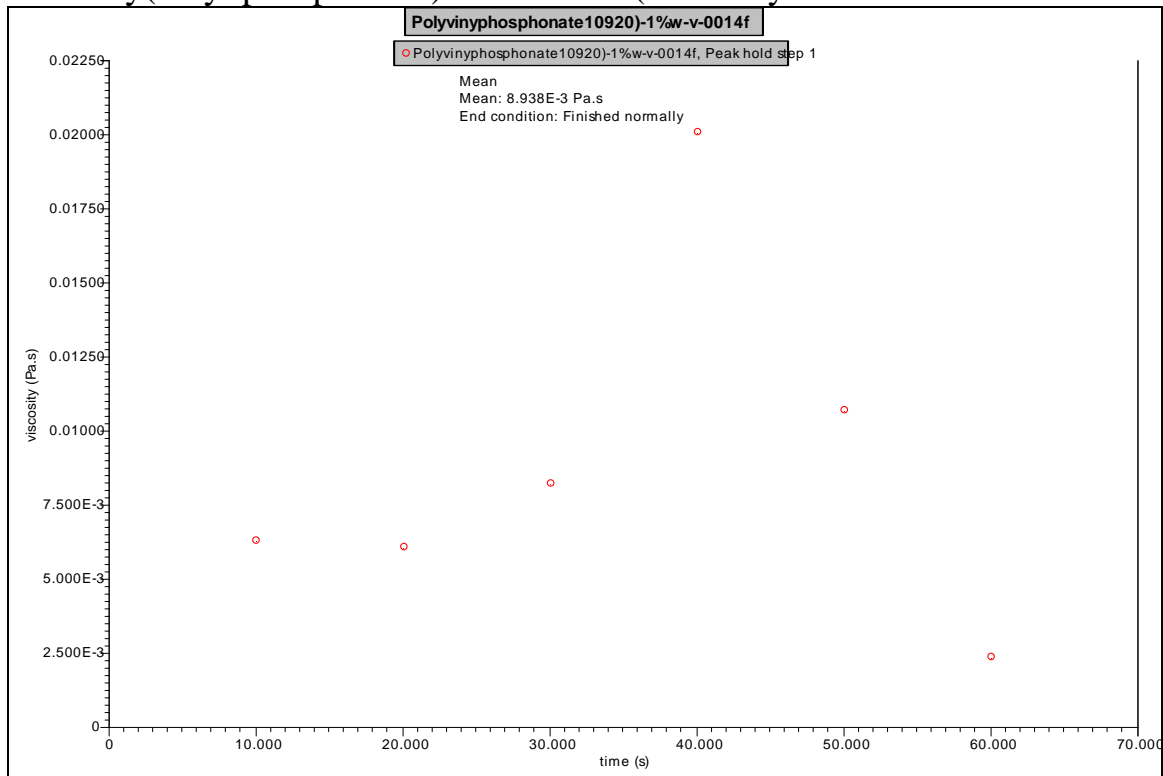


No. PVPhos-9

Certificate of Analysis

Product Name: Poly(vinyl phosphonate) sodium salt (Viscosity 9 cP 1% in water at 60RPM)



• Viscosity (V) of Poly(vinyl phosphonate) sodium salt

Analysis Method: 1% solution in distilled water placed in AR550 rheometer with 2° 60mm plate temperature held at 25C rotated at 60RPM 6 measurements made every 10 seconds over the course of 1 minute. Listed value is average ± standard deviation.

Polymer	Viscosity (cP)
Poly(vinyl phosphonate) sodium salt	8.94 ± 6.10

• UV-Vis Spectrum of Poly(vinyl phosphonate) sodium salt

Analysis Method: 1% solution in distilled water measured on Genesis-6 against a Distilled water blank. Spectrum recored at 1nm resolution from 900-190nm wavelength using visionlite software.

