

Product Profile

Identification

Product Name: Poly(N-vinyl pyrrolidone)

Synonym(s): PVP PVP, Polyvidone, Povidone.

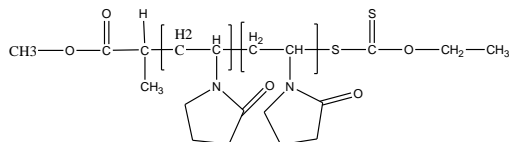
Linear Formula: (C₆H₉NO)_n

CAS: 9003-39-8

Polyvinylpyrrolidone (PVP), also commonly called **polyvidone** or **povidone**, is a water-soluble polymer available in a range of molecular weights, and can be selected according to the desired application properties.

Product Lot Number: P44850-NVP

Product Chemical Architecture:

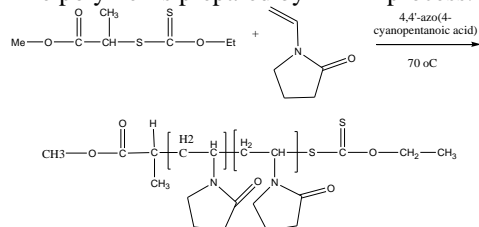


Composition:

Mn (g/mole)	5,000
MW (g/mole)	12,000
Mw/Mn	2.4
dn/dc (mL/g)	Temperature: 30oC, dn/dc = 0.175 ml/gram.

Method of Synthesis

The polymer is prepared by RAFT process.



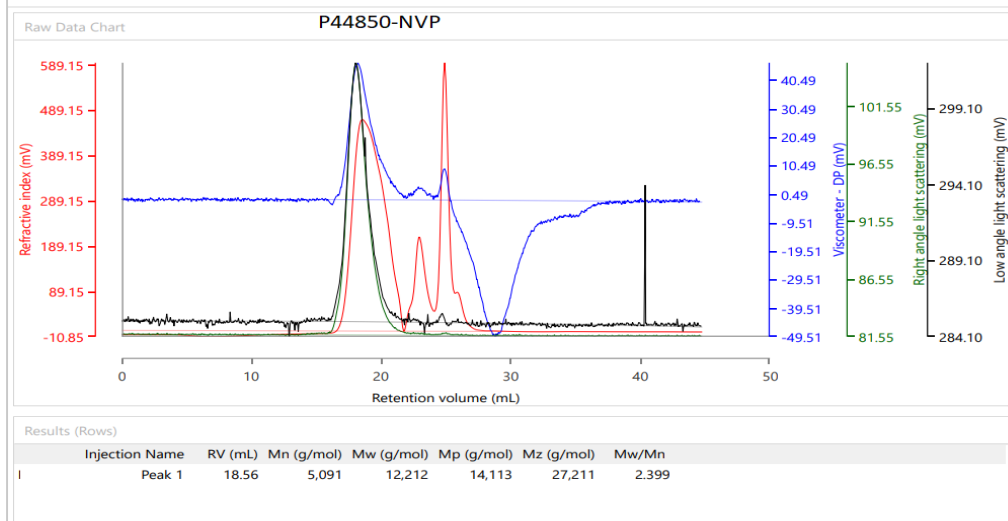
Solubility in different solvents

DCM	√	Ethanol	√
CHCl ₃	√	Ethylene glycol	√
Water	√	DMSO	√

Validation of Architecture

A. Gel Permeation Chromatography (GPC), SEC- Profile:

Molecular weights were determined by Malvern OmniSec Reveal & Resolve GPC/SEC System equipped with Triple detector (RI, Viscometer, RALS 90° and LALS 7°) and two columns (A600M General Mixed 300×7.5 mm, Viscotek). 0.25 M NaNO₃ + 0.01M NaH₂PO₄ (PH=7) in water was the eluent. The flow rate was 1.0 ml/min.



B. NMR (HNMR) OF polymer in CdCl₂

