

Product Profile

Identification

Product Name: Poly(styrene-b-2-vinyl-pyridine)

Product Lot Number: P11431-R-S2VP

CAS #: 24980-54-9

Product Chemical Architecture:



Composition:

Composition (S-b-2VP)	41,000-b-45,000
2VP mole %	52.3
Mn (g/mole)	87,000
Mw (g/mole)	90,000
Mw/Mn	1.04
dn/dc (mL/g) in DMF at 35 °C	0.16

Method of Synthesis

The polymer is synthesized by anionic polymerization process.

Solubility in different solvents:

THF	√	DMF	√
Alcohol	Depends on composition	CHCl ₃	√
Toluene _(hot)	√	Water	X

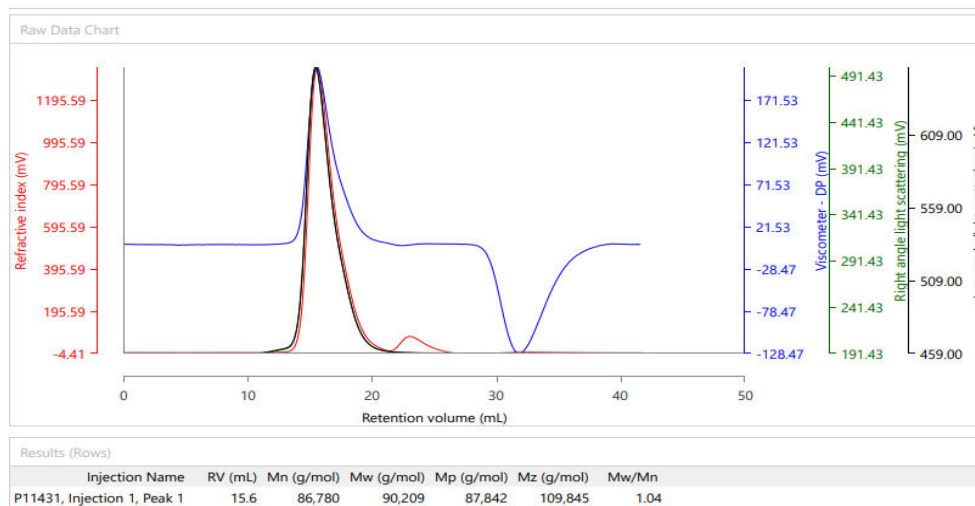
Validation of Architecture

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 (PSS, SDV, 8x300 mm). DMF with 0.023M LiBr was the eluent. The flow rate was 0.7 ml/min.

Polymer Source

Malvern Panalytical



Chemical structure of p11431-S2VP is shown above the spectrum. The structure is a copolymer with three repeating units: a methacrylate unit, a styrene unit, and a naphthalene-substituted unit. The atoms are color-coded: red for methyl carbons, green for the naphthalene ring, and black for other carbons.