

Product Profile

Identification

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

Product Lot Number: P10671-R-S2VP

CAS #: 24980-54-9

Product Chemical Architecture:



Composition:

Composition (S-b-2VP)	1,578,000-b-33,000
2VP mole %	2.1
Mn (g/mole)	1,612,000
Mw (g/mole)	1,726,000
Mw/Mn	1.07
dn/dc (mL/g) in DMF at 35 °C	0.165

Method of Synthesis

The polymer is synthesized by anionic polymerization process.

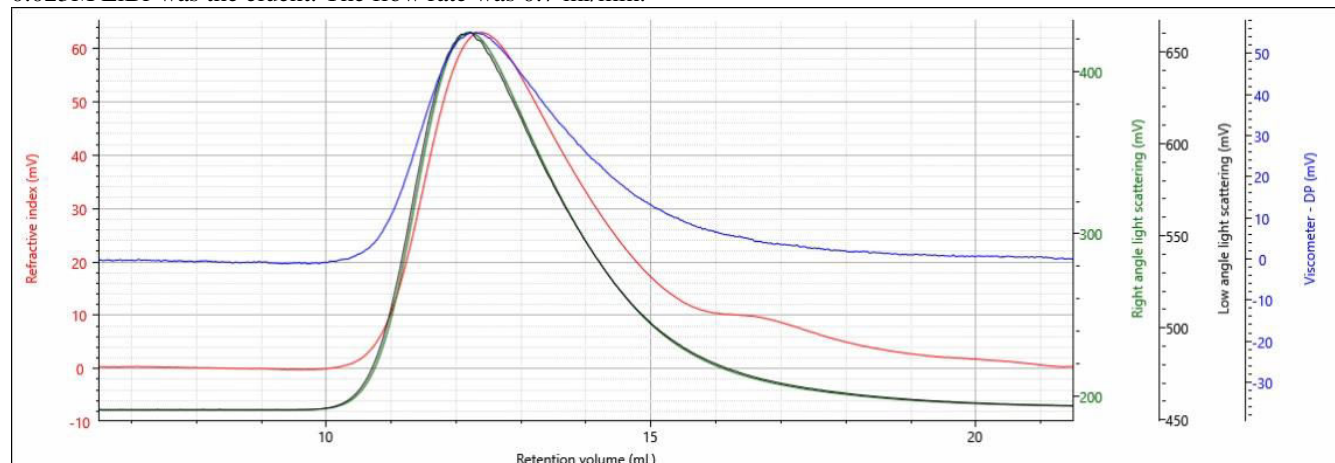
Solubility in different solvents:

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.



Results (Rows)

Injection Name	RV (mL)	Mn (g/mol)	Mw (g/mol)	Mp (g/mol)	Mz (g/mol)	Mw/Mn
P10671, Injection 1, Peak 1	12.4	1,611,560	1,726,155	1,842,337	1,834,607	1.071

B. NMR (^1H NMR) of S2VP

