

Product Profile

Identification

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

Product Lot Number: P5072-R-S2VP

CAS #: 24980-54-9

Product Chemical Architecture:



Composition:

Composition (S-b-2VP)	498,000-b-26,000
2VP mole %	4.9
Mn (g/mole)	523,000
Mw (g/mole)	614,000
Mw/Mn	1.17
dn/dc (mL/g) in DMF at 35 °C	0.164

Method of Synthesis

The polymer is synthesized by anionic polymerization process.

Solubility in different solvents:

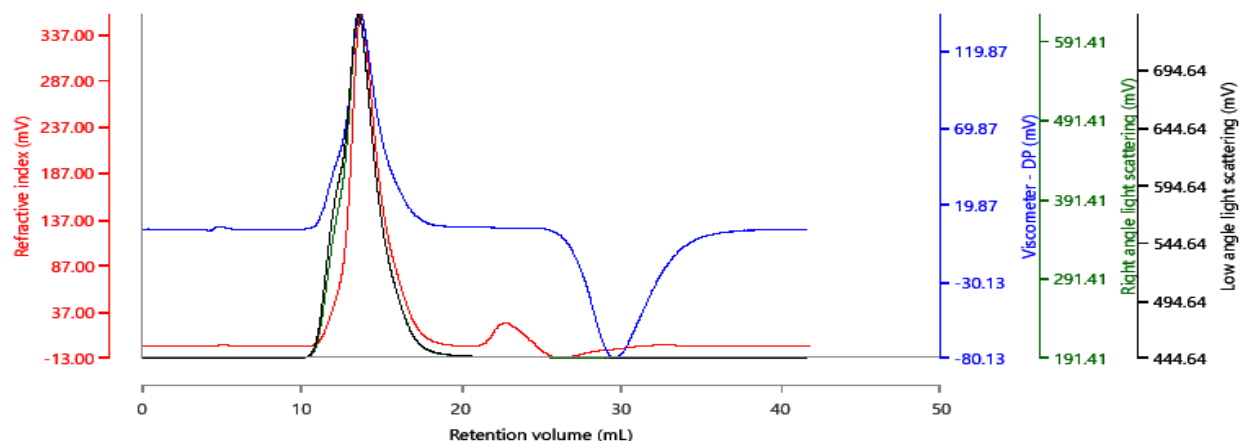
THF	√	DMF	√
Alcohol	Depends on composition	CHCl ₃	√
Toluene _(hot)	√	Water	X

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.

Raw Data Chart



Results (Rows)

Injection Name	RV (mL)	Mn (g/mol)	Mw (g/mol)	Mp (g/mol)	Mz (g/mol)	Mw/Mn
P5072, Injection 1, Peak 1	13.75	523,481	613,828	485,732	902,473	1.173

B. NMR (^1H NMR) of S2VP in CHCl_3

