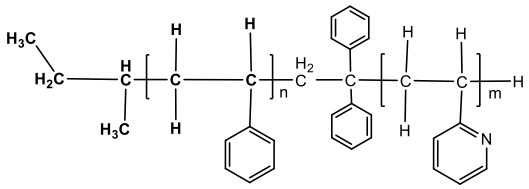
Product Profile

Identification

Product Name: Poly(styrene-b-2-vinyl-pyridine)
Product Lot Number: P9260-R-S2VP
CAS #: 24980-54-9
Product Chemical Architecture:



Composition:

Composition (S-b-2VP)	**1,647,000-b-81,000**
2VP mole%	**4.7**
Mn (g/mole)	**1,729,000**
Mw (g/mole)	**1,795,000**
Mw/Mn	**1.04**
dn/dc (mL/g) in DMF at 35 °C	**0.164**

Method of Synthesis

The polymer is synthesized by anionic polymerization process.

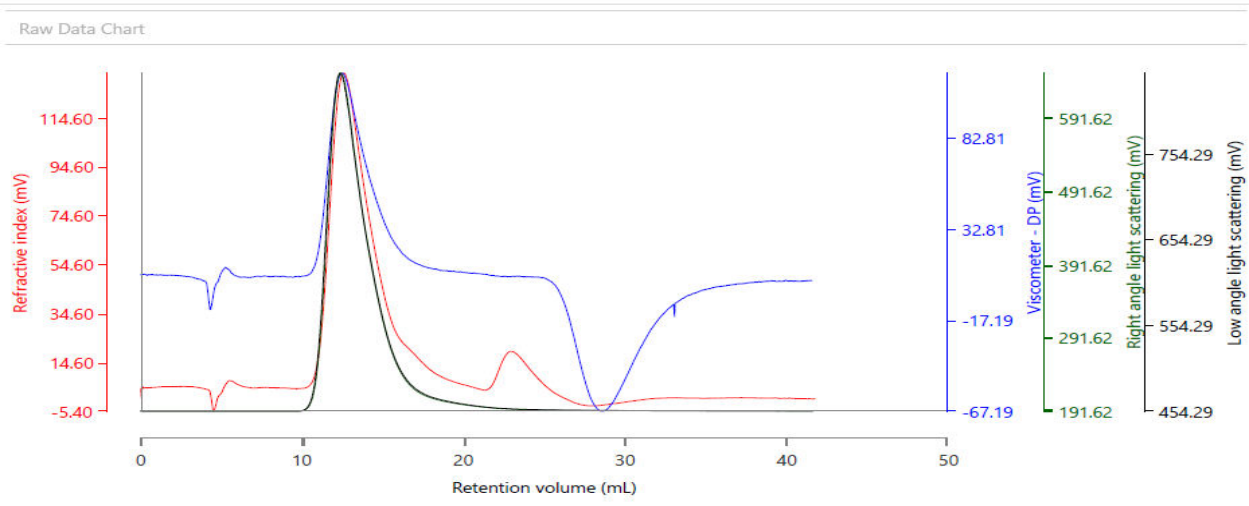
Solubility in different solvents:

THF	√	DMF	√
Alcohol	**Depends on composition**	$CHCl_3$	√
$Toluene_{(hot)}$	√	Water	**X**

Validation of Architecture

A. <u>Gel Permeation Chromatography (GPC), SEC Profile:</u>

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
P9260, Injection 1, Peak 1	12.59	1,728,608	1,795,325	1,776,573	1,891,687	1.039

B. NMR (H^1NMR) of S2VP