

Product Profile

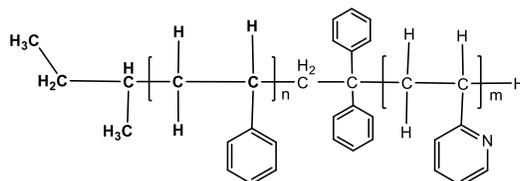
Identification

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

Product Lot Number: P9361-R-S2VP

CAS #: 24980-54-9

Product Chemical Architecture:



Composition:

| | |
|-------------------------------------|------------------------|
| Composition (S-b-2VP) | 67,000-b-59,000 |
| 2VP mole % | 46.7 |
| Mn (g/mole) | 126,000 |
| Mw (g/mole) | 139,000 |
| Mw/Mn | 1.11 |
| dn/dc (mL/g) in DMF at 35 °C | 0.159 |

Method of Synthesis

The polymer is synthesized by anionic polymerization process.

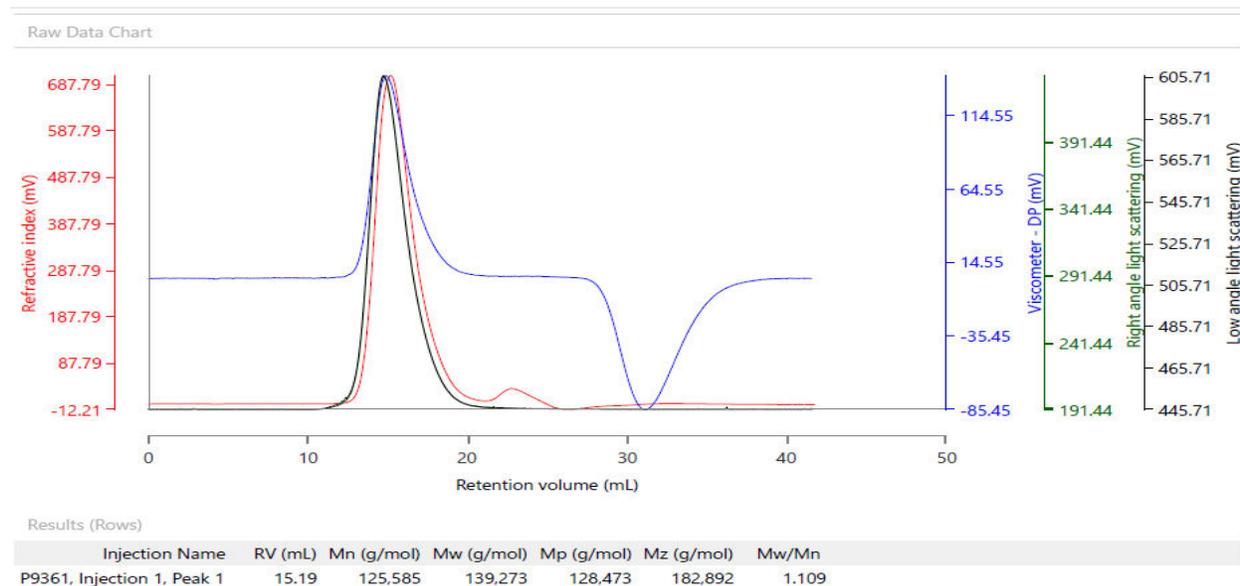
Solubility in different solvents:

| | | | |
|--------------------------|-------------------------------|-------------------|---|
| 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.



B. NMR (^1H NMR) of S2VP in CDCl_3

