



Product Profile

Identification

Product Name: Poly(pentafluorostyrene)

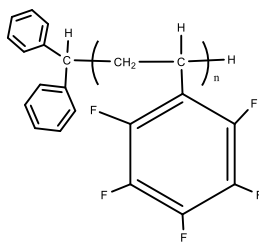
Product Lot: P45121-5FS

Synonym(s): 2,3,4,5,6-Pentafluorostyrene homopolymer

Linear Formula: (C₈H₃F₅)_n

CAS Number: 26838-55-1

Product Structure:



Composition:

Mn (g/mole)	3,000
Mw (g/mole)	5,000
Mw/Mn	1.6
dn/dc (mL/g) in THF at 30 °C	0.184

Method of Synthesis

The polymer is synthesized by anionic process using Li alcolate additive and (Ph)₂CHK as initiator.

Solubility in different solvents:

THF	√		
Alcohol	X	CHCl ₃	√
Toluene	√	Water	X



Validation of Architecture

A. Gel Permeation Chromatography (GPC), SEC Profile:

Molecular weights were determined by Agilent Technologie 1260 Infinity II GPC/SEC System equipped with Triple detector (RI, Viscometer, RALS 90° and LS 15°) and three columns (PLgel, 7.5x300 mm, 5µm-10µm, 10⁵-10⁶Å). THF (stabilized BHT) with 1% (v/v%) TEA was the eluent. The flow rate was 1.0 ml/min.

