

Product Profile

Identification

Product Name: Poly(pentafluorostyrene)

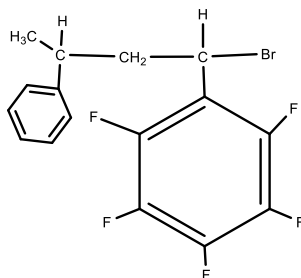
Product Lot: P45144-5FS

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

Linear Formula: (C₈H₃F₅)_n

CAS Number: 26838-55-1

Product Structure:



Composition:

Mn (g/mole)	86,000
Mw (g/mole)	177,000
Mw/Mn	2.0
dn/dc (mL/g) in THF at 30 °C	0.184

Method of Synthesis

The polymer is synthesized by ATRP process.

Solubility in different solvents:

THF	√		
Alcohol	X	CHCl₃	√
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.

