

Product Profile

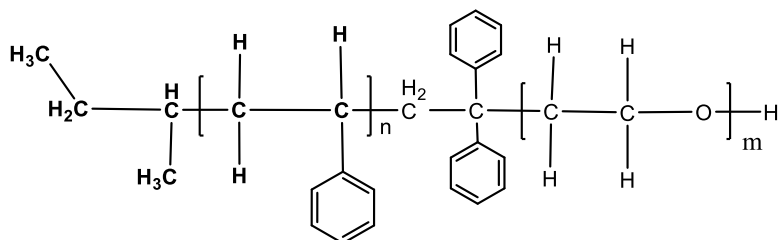
Identification

Product Name: Poly(styrene-b-ethylene oxide)

Product Lot Number: P44768-SEO

CAS #: Not Available

Product Chemical Architecture:



Composition:

Composition (S-b-EO)	8,000-b-45,000
EO mole%	16.0
Mn (g/mole)	53,000
Mw (g/mole)	56,500
Mw/Mn	1.06
dn/dc (mL/g) in THF at 30 °C	0.105

Method of Synthesis

The polymer is synthesized by anionic polymerization process.

Solubility in different solvents:

THF	√	DMF	√
Alcohol	X	CHCl ₃	√
Toluene	X	Water	X

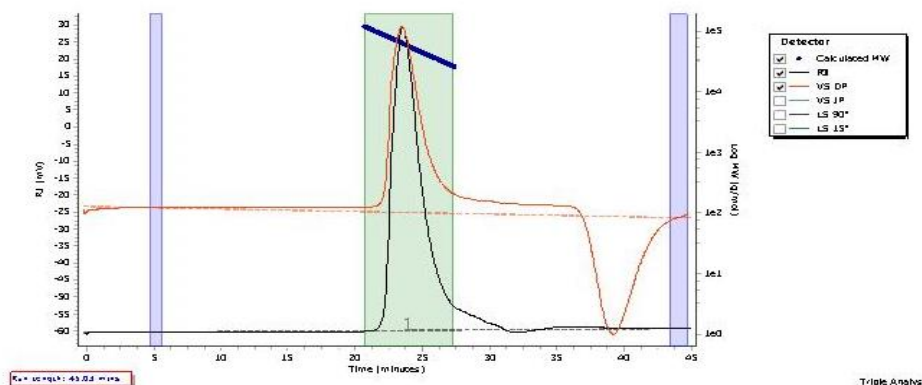
Validation of Architecture

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.

Chromatogram Plot

P44764-SEO



Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	62723	53127	56596	59666	62336	58453	1.065

B.

NMR (^1H NMR) of SEO

SMMA sample was dissolved in CDCl_3 . ^1H NMR spectra was determined using a 500 MHz. Bruker Avance III spectrometer.

