

Product Profile

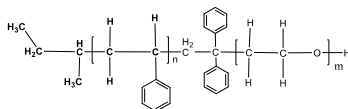
Identification

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

Product Lot Number: P44892-SEO

CAS #: Not Available

Product Chemical Architecture:



Composition:

Composition (S-b-EO)	9,500-b-18,000
Mn (g/mole)	27,500
Mw (g/mole)	30,400
Mw/Mn	1.10
	S₉₁EO₄₀₉

Method of Synthesis The polymer is synthesized by anionic polymerization process.

Solubility in different solvents:

THF	√	DMF	√
Alcohol	X	CHCl ₃	√
Toluene-Hot	√	Water	×

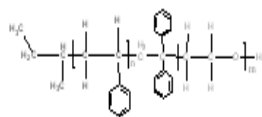
Validation of Architecture

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

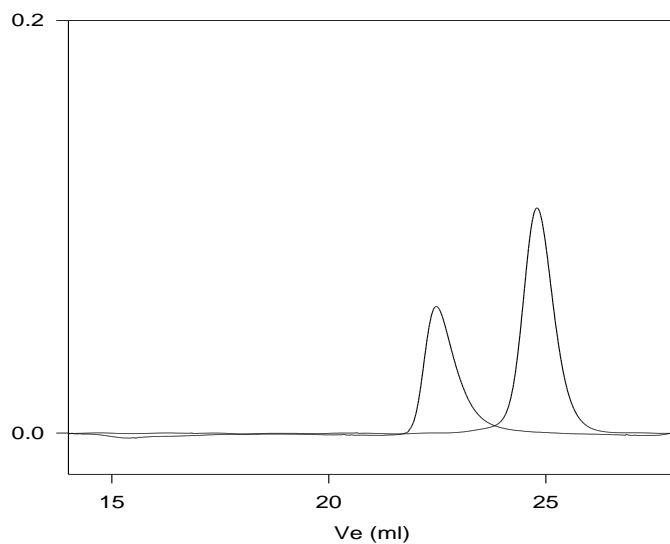
Molecular weights were determined by Agilent Technologie 1260 Infinity II GPC/SEC System equipped with Triple detector (RI, Viscometer, RALS 90° and LS 15°) and three columns (PLgel, 7.5x300 mm, 5µm-10µm, 10⁵-10⁶Å). THF (stabilized BHT) with 1%(v/v%) TEA was the eluent. The flow rate was 1.0 ml/min.

B. NMR (H¹NMR) of SEO

Sample was dissolved in CDCl₃. ¹H NMR spectra was determined using a 500 MHz. Bruker Avance III spectrometer.



P44892-SEO



Size Exclusion Chromatography:

—— Polystyrene, $M_n=9,500$, $M_w=10,000$, $PI=1.05$
 —— Block Copolymer Polystyrene-*b*-Poly(ethylene oxide)
 M_w : PS(9,500)-*b*-PEO(18,000), $PI=1.10$

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