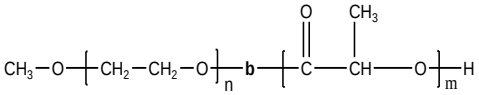
Product Profile

Identification

Product Name: or Methoxy poly(ethylene glycol)-*b*-poly(L-lactide)

Or Poly(ethylene glycol -b- lactide) (dL form)
or Polyethyleneglycol methylether-*block*-Poly dL lactide

Linear Formula:
$HO[CH(CH_3)COO]_m[CH_2CH_2O]_nCH_3$
Product Lot Number: P6529R-EOLA
Product Chemical Architecture:



Composition:

Mn x 10^3 mPEG-b-LA (dl form)	Mw/Mn (PDI)	Lactide
5.0-b-15.0	1.25	(dL form)
Dp of each block: $mPEG_{113}$-b-LA_{208})		

Method of Synthesis

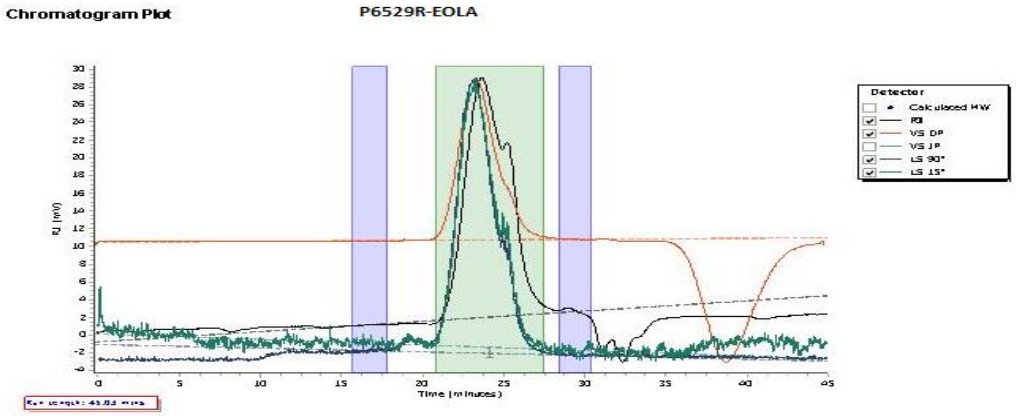
Poly(ethylene oxide -b- lactide) is prepared by living anionic polymerization of ethylene oxide and coordination polymerization of lactide with Tin octoate as catalyst.

Solubility in different solvents

THF ($_{warm}$)	√		
CHCl3	√	CHCl3	√
Toluene-($_{warm}$)	√		

Important biocompatible, amphiphilic block copolymer composed of a hydrophilic PEG block and a hydrophobic poly(D,L-lactide) (PLA) block. These materials are for control release and nanoparticle formulation for drug encapsulation and delivery applications.
Architecturally controlled well-defined materials with varying properties can be prepared by controlling the relative length of each polymer block. OH, SH and NH2 end terminated polymers allows for facile further chemical modification of these materials.

A. <u>Gel Permeation Chromatography (GPC), SEC- Profile:</u>



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	28241	20819	26178	31905	37405	31540	1.257

B. **NMR (HNMR) of OH terminated Polymer:**