

## Product Profile

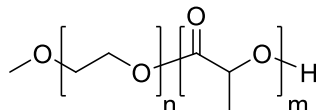
### Identification

**Product Name:** Poly(ethylene oxide-b-lactide)

**Product Lot Number:** P5118A-R-EOLA

**CAS #:** Not Available

**Product Chemical Architecture:**



**Composition:**

<b>Composition (EO-b-LA)</b>	700-b-1,500
<b>EO mole%</b>	31
<b>Mw (g/mole)</b>	2,600
<b>Mw/Mn</b>	1.19
<b>dn/dc (mL/g) in THF at 30 °C</b>	0.012

### Method of Synthesis

The polymer is synthesized by anionic polymerization and coordination polymerization processes.

**Solubility in different solvents:**

<b>THF</b>	√	<b>DMF</b>	√
<b>Alcohol</b>	X	<b>CHCl<sub>3</sub></b>	√
<b>Toluene-Hot</b>	√	<b>Water</b>	X

### Validation of Architecture

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

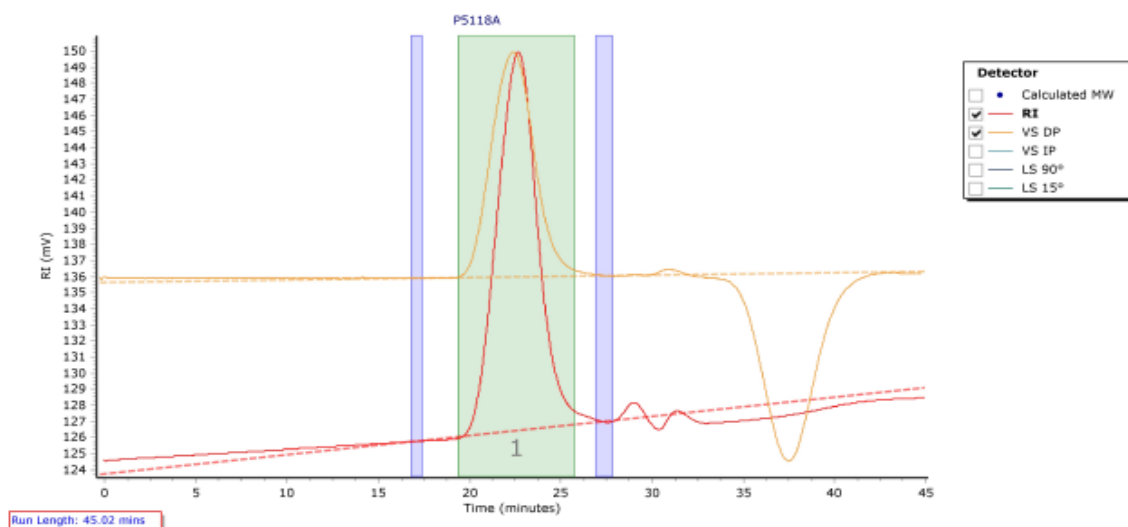
Molecular weights were determined by Agilent Technologie 1260 Infinity II GPC/SEC System equipped with Triple detector (RI, Viscometer, RALS 90° and LS 15°) and three columns (PLgel, 7.5x300 mm, 5µm-10µm, 10<sup>5</sup>-10<sup>6</sup>Å). THF (stabilized BHT) with 1%(v/v%) TEA was the eluent. The flow rate was 1.0 ml/min.



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P5118A

Chromatogram Plot

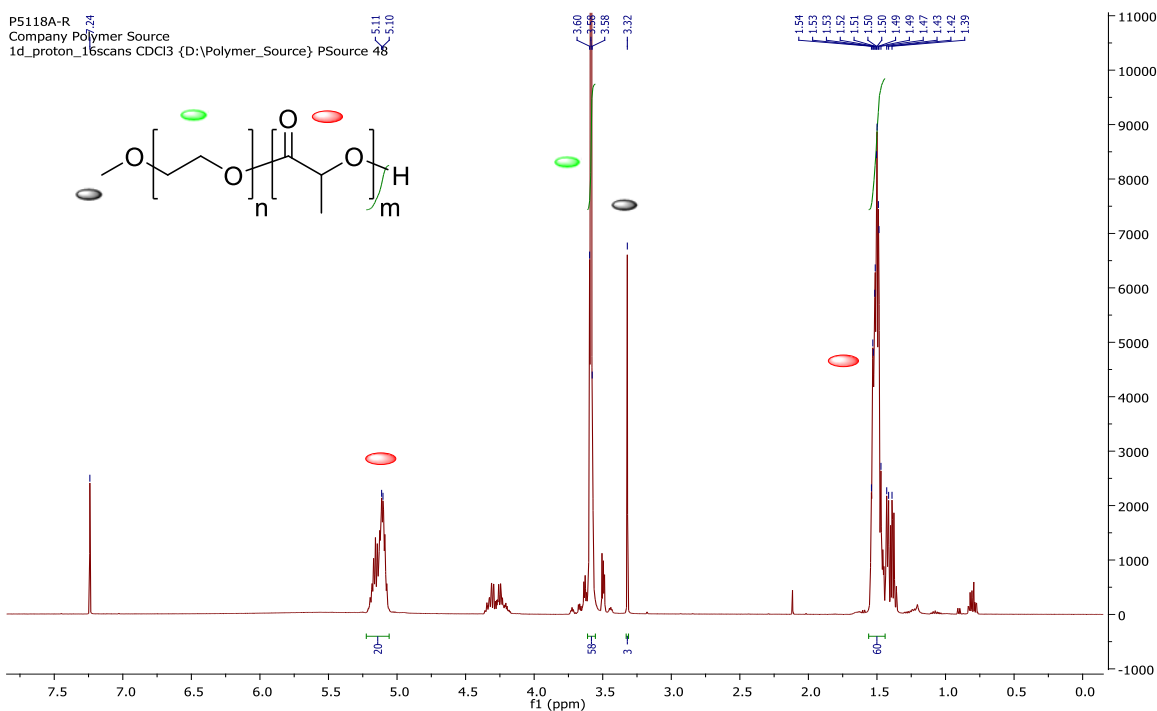


Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	2350	2170	2571	3003	3449	2806	1.185

## B. NMR (<sup>1</sup>H NMR) of EOLA

EOLA sample was dissolved in CDCl<sub>3</sub>. <sup>1</sup>H NMR spectra was determined using a 500 MHz. Bruker Avance III spectrometer.



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