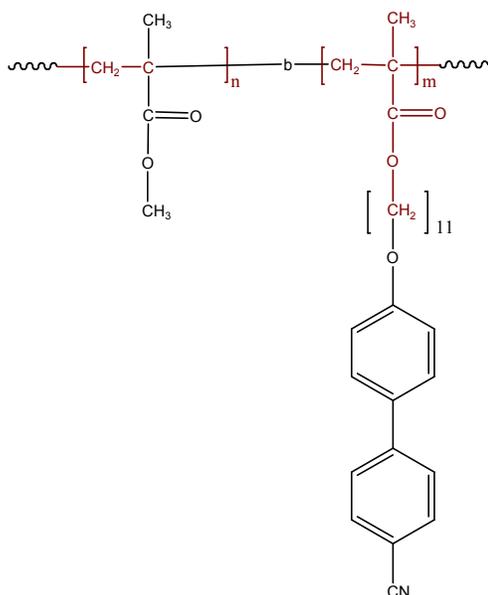


Sample Name:
Poly(Methylmethacrylate-b-11-(4'-cyanobiphenyl-4-yloxy) undecyl methacrylate

Sample #: *P10819-MMA-4CNBP-11CMA*

Structure:



Composition:

Mn x 10 ³ PMMA-b- 4CNBP11CMA	PDI
11.0-b-33.0	1.3
Microstructure of 4CNBP11CMA	Syndio:hetero:iso 53:32:15
mp (°C)	121

Synthesis Procedure: Anionic and controlled radical process

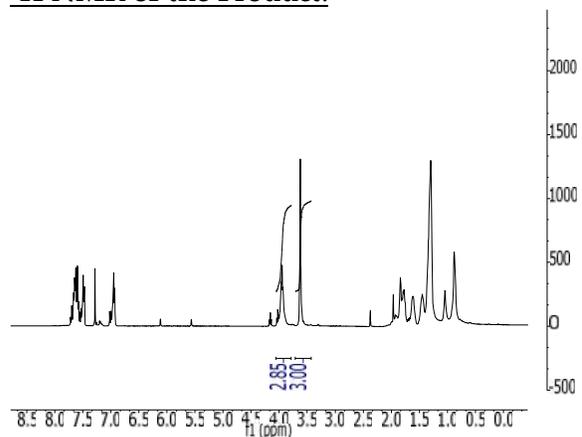
Purification of the polymer:

The un-reacted 11-LCMA monomer was removed by stirring the polymer in hot Methanol. The obtained polymer dissolved in CHCl₃/toluene and pass through the column packed with silica. The polymer was recovered by precipitation in cold ether/hexane mixture.

Solubility:

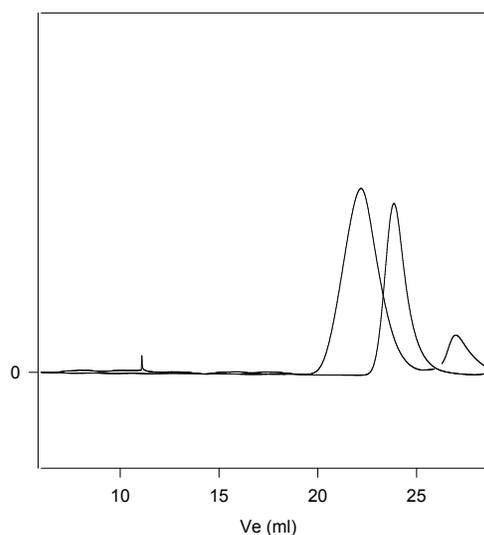
Polymer is soluble in CHCl₃, THF and toluene. The polymer precipitated out from hexane.

¹H NMR of the Product:



SEC of the block copolymer:

P10819-MMA-4CNBP11CMA



Size exclusion chromatography of the product:

- Br-end terminated Poly(Methylmethacrylate), M_n = 11,000, PI = 1.09
- Block Copolymer MMA(11,000)-b-4-CNBP11CMA (33,000), PI = 1.30

DSC of the block copolymer

