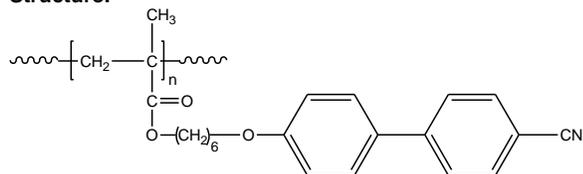


Sample Name:

Poly(6-(4'-cyanoobiphenyl-4-yloxy)hexyl methacrylate)

Sample #: P11007A-4CNBPMA

Structure:

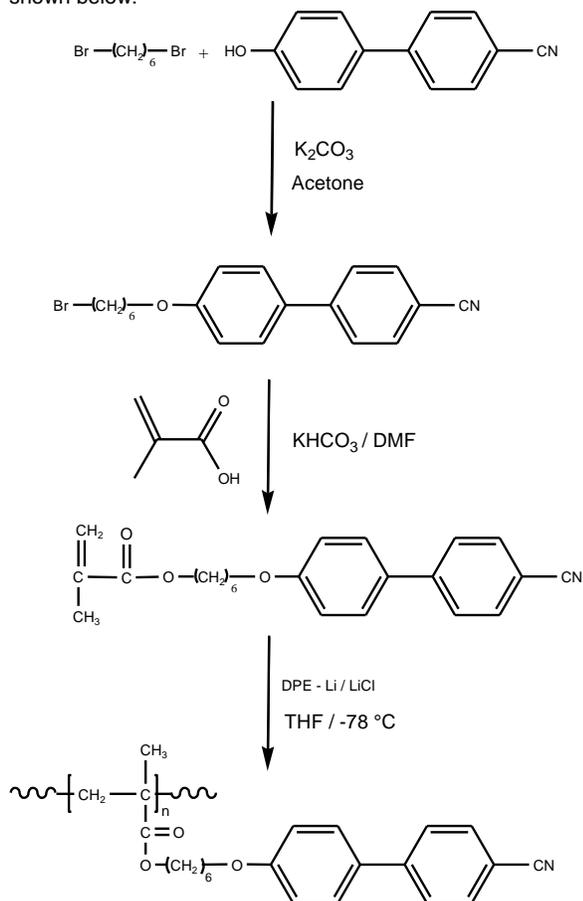


Composition:

Mn x 10 ³	PDI
13.0	1.25

Synthesis Procedure:

Poly(6-(4'-cyanoobiphenyl-4-yloxy)hexyl methacrylate) is obtained by living anionic polymerization of the monomer. The reaction scheme used for the polymer synthesis is shown below:



Characterization:

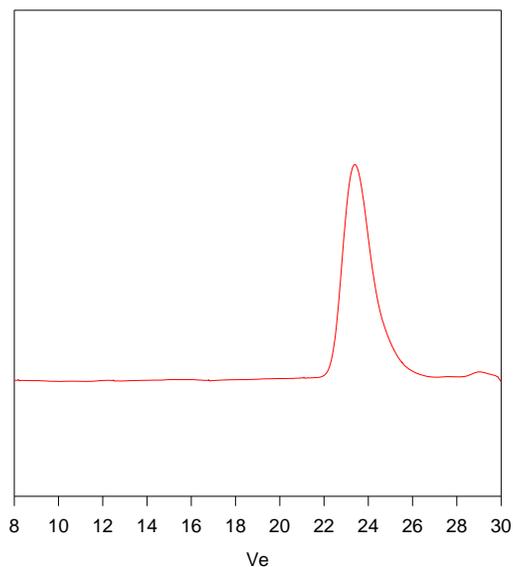
The molecular weight and polydispersity index (PDI) of Poly(6-(4'-cyanoobiphenyl-4-yloxy)hexyl methacrylate) are obtained by size exclusion chromatography.

Solubility:

Poly(6-(4'-cyanoobiphenyl-4-yloxy)hexyl methacrylate) is soluble in THF, acetone, dichloromethane and chloroform but insoluble in hexane, ethanol and water.

SEC of Homopolymer:

P11003-4CNBPMA



Size Exclusion Chromatography of:

Poly[6-[4-(4-cyanophenyl)phenoxy]hexyl methacrylate]

M_w = 17,000 Mw; 20,000, M_w/M_n = 1.18