

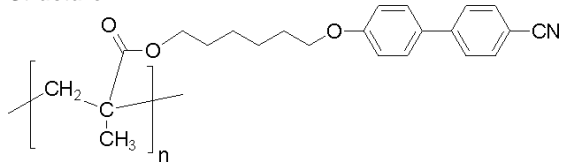
Sample Name:

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

**Poly(6-(4'-cynaobiphenyl-4-yloxy)hexyl methacrylate)**

Sample #: **P9360B-CNBPHMA**

**Structure:**

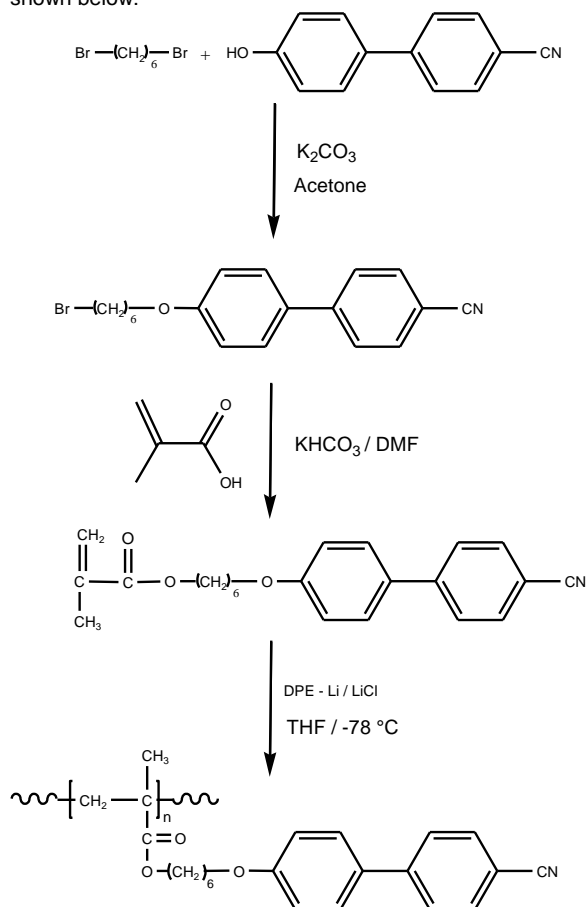


**Composition:**

|                                     |                                  |
|-------------------------------------|----------------------------------|
| Mn x 10 <sup>3</sup>                | PDI                              |
| 34,000.0<br>(34 millions)           | Broad                            |
| Microstructure<br>Iso:hetero:syndio | Rich in iso contents over<br>90% |

**Synthesis Procedure:**

Poly(6-(4'-cynaobiphenyl-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:**

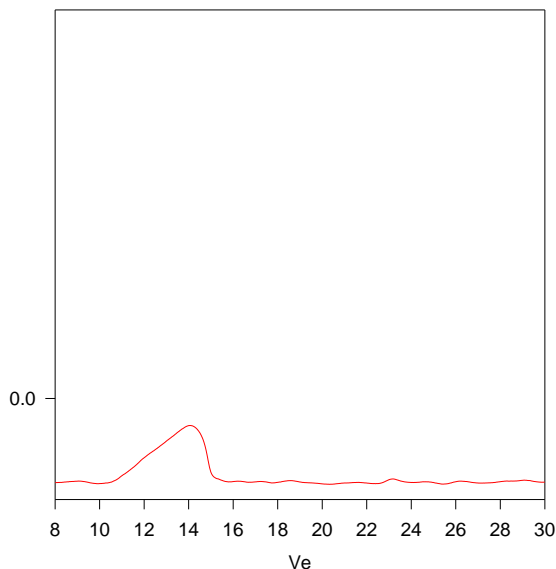
The molecular weight and polydispersity index (PDI) of Poly(6-(4'-cynaobiphenyl-4-yloxy)hexyl methacrylate) are obtained by size exclusion chromatography.

**Solubility:**

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

**SEC of Homopolymer:**

**P9360B-CNBPHMA**



Size Exclusion Chromatography of:

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

M<sub>w</sub> = 34 Millions, M<sub>w</sub>/M<sub>n</sub> = Broad (6.8)

