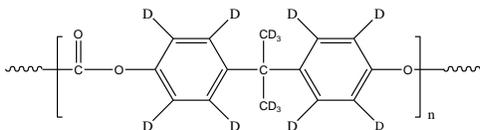


**Sample Name: Deuterated Polycarbonate (d14)  
(Bisphenol A Based)**

**Sample #: P41772C-d14PC**

**Chemical Structure:**



**Composition:**

Mw x 10 <sup>3</sup>	Mn x 10 <sup>3</sup>	PDI
6.5	3.5	1.8

**Purification of the Polymer:**

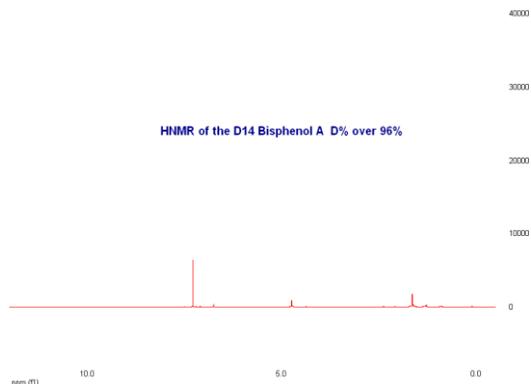
Purification of the obtained polymer was carried out rigorously as follows to ensure the removal of the catalyst side product (NaOH and phosgene byproducts):

1. Dissolved the polymer in Benzene and wash with water.
2. Polymer solution in benzene was dried over anhydrous sodium sulfate.
3. Solution filtered and then passed through a column packed with basic Al<sub>2</sub>O<sub>3</sub>. Solution was filtered and then concentrated on rota-evaporator.

Polymer solution freeze dried from Benzene and dried at 40 °C for 24h.

D14 Bisphenol monomer was characterized by Mass spectroscopy and by HNMR

**H NMR spectrum of D14 Bisphenol A monomer:**



**Characterization:**

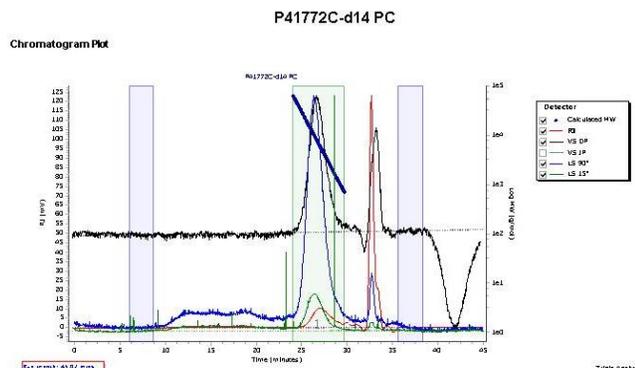
The product was characterized by size exclusion chromatography (SEC).

**Solubility:**

Polymer is soluble in CHCl<sub>3</sub>, Benzene and THF.

**SEC profile of the product:**

Agilent GPC/SEC Software



Molecular Weight Averages							PDI
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mu (g/mol)	
Peak 1	8132	3506	8519	11103	17859	10141	1.859