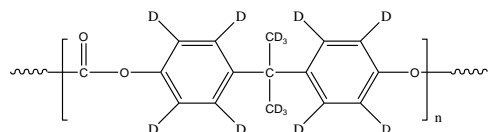


**Sample Name: Deuterated Polycarbonate (d14)  
(Bisphenol A Based)**

**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:**

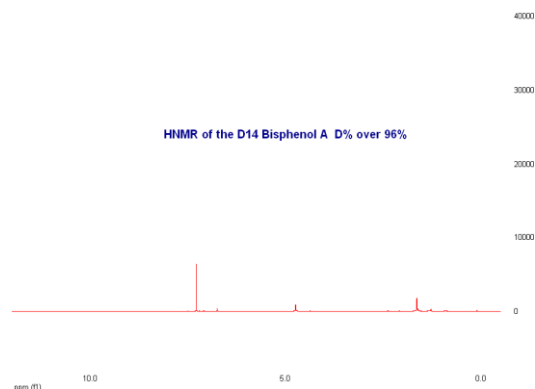
Purification of the obtained polymer was carried out rigorously as follows to ensure the removal of the catalyst side product (NaOH and phosgene byproducts):

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

