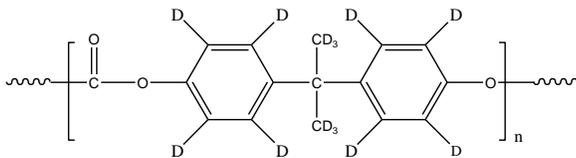


**Sample Name: Deuterated Polycarbonate (d14)
(Bisphenol A Based)**

Sample #: P41772-d14PC

Chemical Structure:



Composition:

Mn x 10 ³	Mw x 10 ³	PDI
6.0	7.5	1.27

Purification of the Polymer:

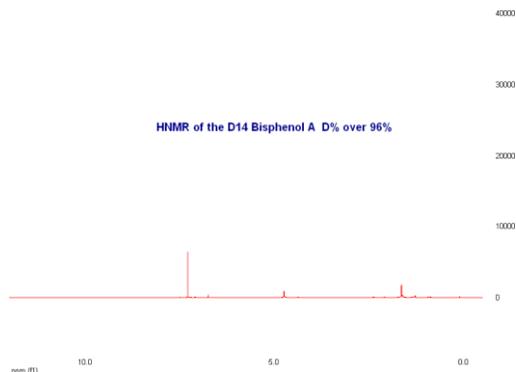
Purification of the obtained polymer was carried out rigorously as follows to ensure the removal of the catalyst side product (NaOH and phosgene byproducts):

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 Al₂O₃. 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:

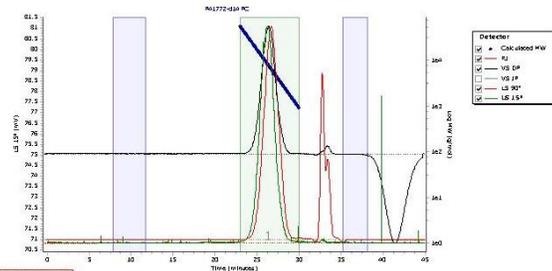
Polymer is soluble in CHCl₃, Benzene and THF.

SEC profile of the product:

Agilent GPC/SEC Software

P41772-d14 PC

Chromatogram Plot



Peak	Mp (g/mol)	Mn (g/mol)	Mv (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mw (g/mol)	PDI
Peak 1	6651	5809	7424	8537	12508	3200	1.278