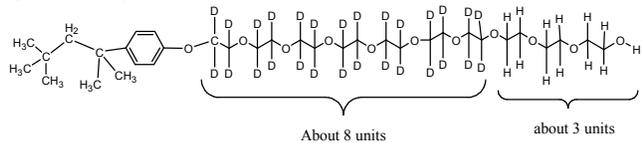


**Sample Name: Partially deuterated Polyethylene glycol tert-octylphenyl ether: similar to Triton X10 with stable isotopes poly ethylene glycol**

**Sample #: P40294-dPEO-TOPE**

**Structure:**



chemical architecture similar to Triton X10 (partially deuterated stable isotopes)

**Composition:**

Mn x 10 <sup>3</sup>	PDI
0.67	1.08
Physical Appearance at room temperature	Wax like and light ivory color

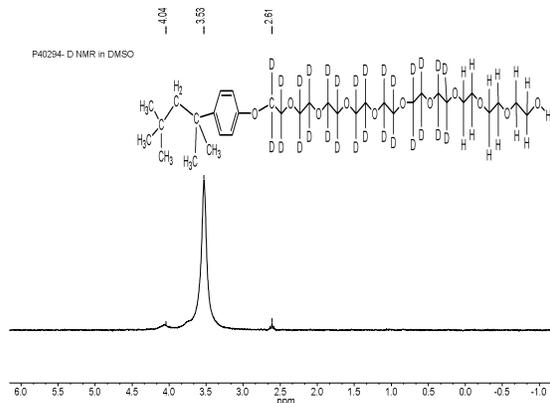
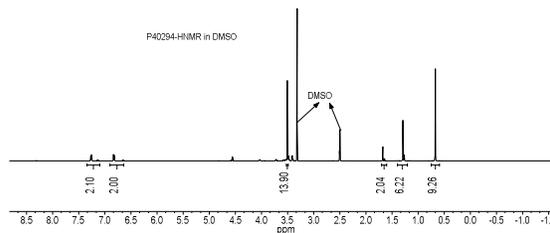
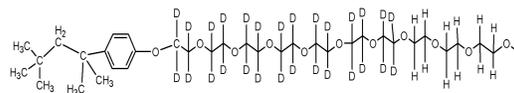
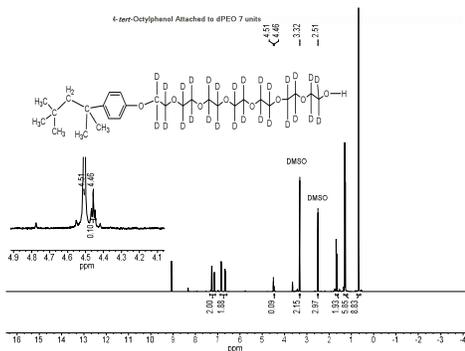
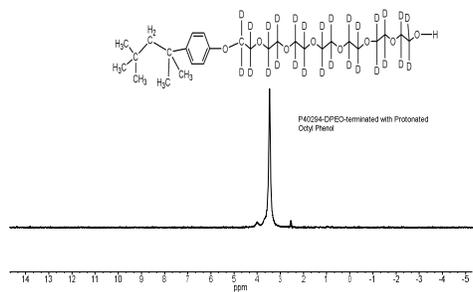
**Synthesis Procedure:**

The product is polymerized by anionic process under pressure using tert-Octyl phenol Cesium salt. Successive addition of deuterated EO at 130 oC followed by addition of Protonated ethylene oxide monomer.

**Characterization:**

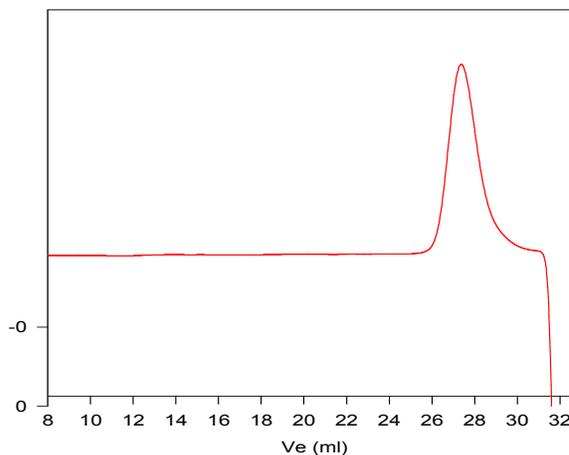
The product was characterized by size exclusion chromatography (SEC) and H<sup>2</sup>NMR.

**H<sup>2</sup> NMR of the product:**



**SEC of the Product:**

**P40294-dPEO-TOPE**



Size exclusion chromatograph of polymer  
M<sub>n</sub>=670, PI=1.08