

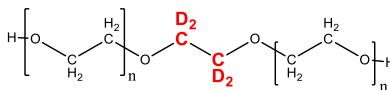
# Product Profile

## Identification

**Product Name:** Partially deuterated Poly(ethylene glycol-d4), (d4 ethylene glycol unit as initiator)

**Sample #:** P45624-F1-dPEO

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	Mw/Mn (PDI)
0.4	1.09

**Method of Synthesis:** By ionic process

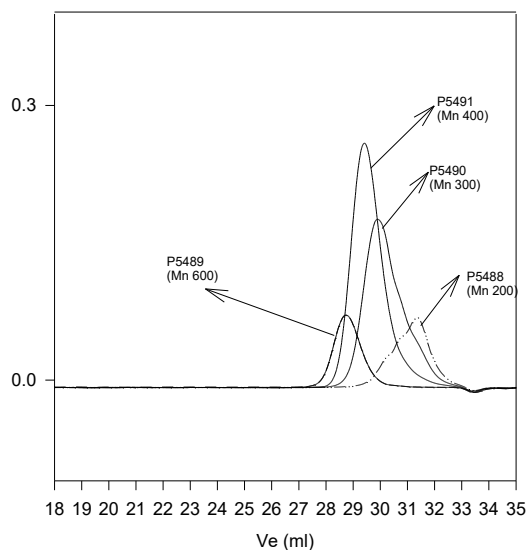
Solubility in different solvents

THF	√	Alcohol	√
CHCl <sub>3</sub>	√	Acetone	√

**Purification of Polymer:** By Column chromatography

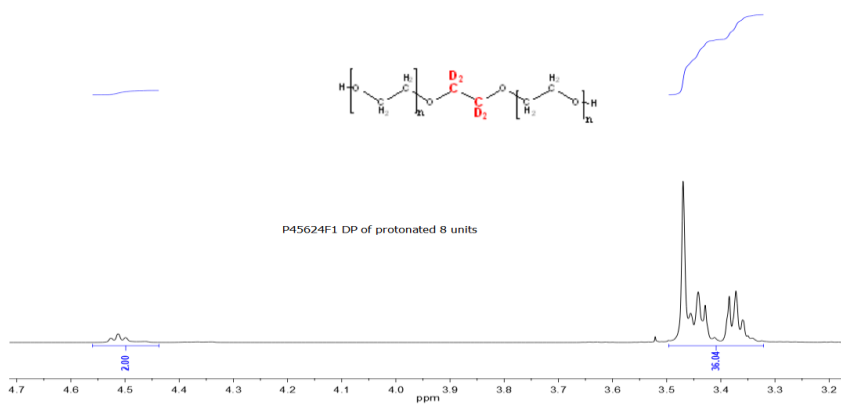
## Validation of Architecture:

A. **Gel Permeation Chromatography (GPC), SEC- Profile**  
**SEC Profile for PEG Oligomers**



Size exclusion chromatography of poly(ethylene glycol):  
 Lot# P 5488-EG2OH Mn=200, Mw=240, Mw/Mn = 1.20  
 Lot# P 5490-EG2OH Mn 300 Mw: 360 Mw/Mn = 1.20  
 Lot# P 5491-EG2OH Mn 400 Mw: 480 Mw/Mn = 1.2  
 Lot# P 5489-EG2OH Mn 600 Mw: 690 Mw/Mn 1.15

**B. H<sup>1</sup>NMR (HNMR) of polymer:**



**H<sup>2</sup>NMR (HNMR) of polymer**

