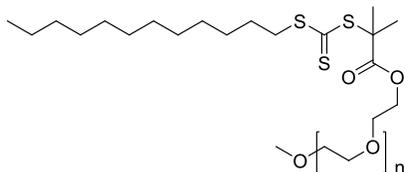


**Sample Name: Poly(ethylene oxide) methyl ether,  $\omega$ -RAFT-terminated**

**Sample #: P20049-mPEG-RAFT**

**Structure:**



**Composition:**

$M_n \times 10^3$ MeO-PEO-RAFT2	PDI
2.4 (NMR)	1.1 (SEC)
RAFT functionality: $\geq 70\%$ (NMR)	

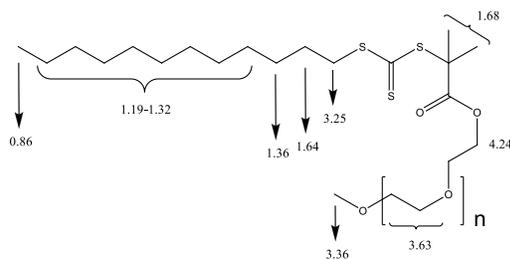
**Solubility:**

Poly(ethylene oxide) is soluble in toluene,  $\text{CHCl}_3$ , Acetone, THF, water. Insoluble in ether, hexane. Precipitated from DCM or  $\text{CHCl}_3$  into ether.

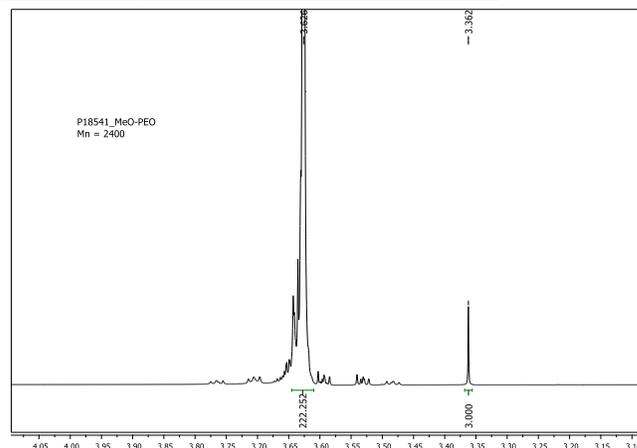
**Characterization:**

PEO bearing RAFT initiating site was analyzed by size exclusion chromatography (SEC) to obtain the polydispersity index (PDI).  $M_n$  and percentage of RAFT functionality was estimated from NMR by comparing the integrals ratio of the peaks at 3.36 and 3.63 ppm, and 3.36 and 4.24 ppm, respectively.

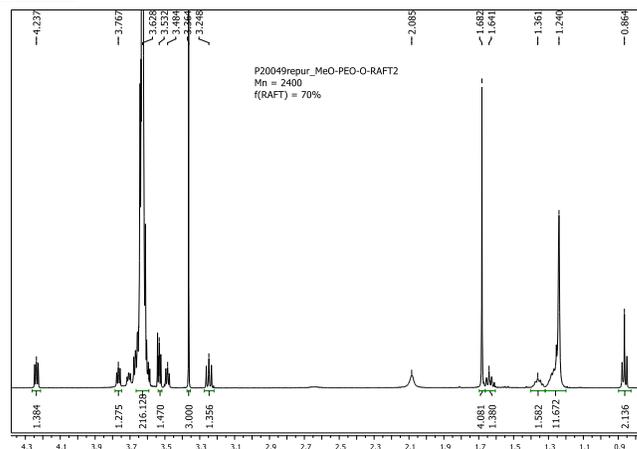
**Chemical shifts assignments**



**$^1\text{H-NMR}$  spectrum of the Initial PEO:**



**$^1\text{H-NMR}$  spectrum PEO with RAFT2 End group**



**SEC profile of the polymer:**

**P20049-mPEG-RAFT**

