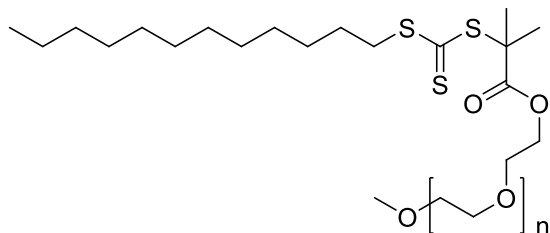


**Sample Name:**  $\alpha$ -Methoxy- $\omega$ -[2-methyl-2-propionic acid dodecyl trithiocarbonate)-terminated Poly(ethylene oxide)

**Sample #:** P44513-mPEG-RAFT  
**Structure:**



### Composition:

$M_n \times 10^3$	PDI
5.0	1.08

RAFT functionality  $\geq 90\%$  (NMR)

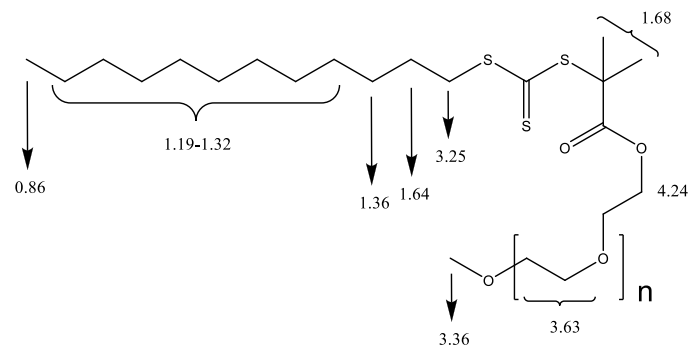
### Characterization:

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.

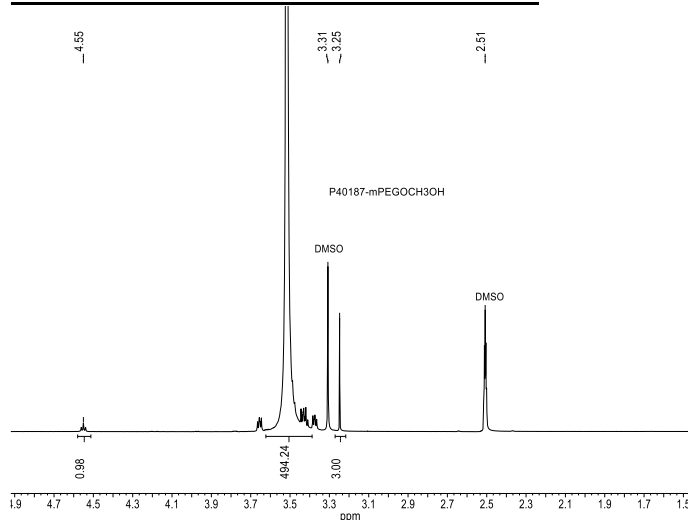
### Solubility:

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

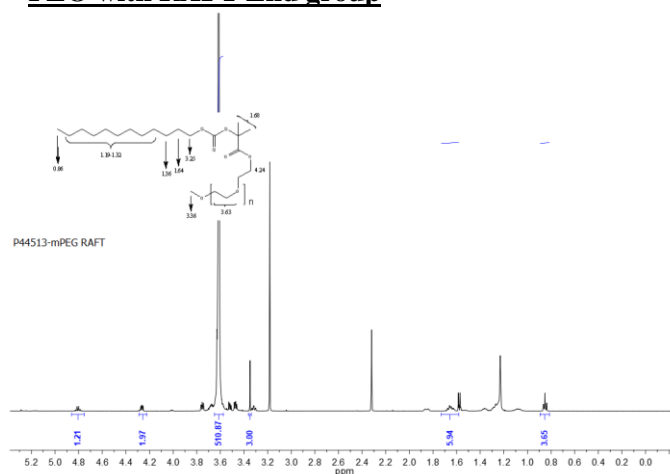
### Chemical shifts assignments



### $^1\text{H}$ -NMR of the Initial PEO- lot# P40187



### PEO with RAFT End group



### SEC profile of the polymer:

P44513-mPEG

