

Product Profile

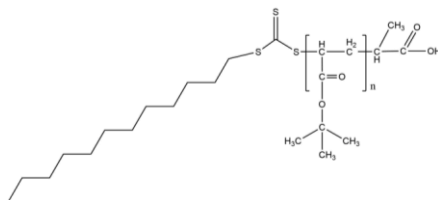
Identification

Product Name: Poly(tert-butyl acrylate), (ω -RAFT, α -Carboxylic acid)-terminated

Poly(Tert. butylacrylate), (α -Carboxylic acid, ω -(*S*-1-dodecyl-*S'*-(α,α' -dimethyl- α'' -acetic acid) trithiocarbonate (DDMAT) or more precisely ω -Dodecyl-trithiocarbonate- terminated.

Product Lot Number: P45135A-tBuACOOH-RAFT

Product Chemical Architecture:

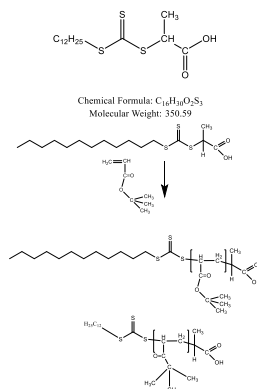


Composition:

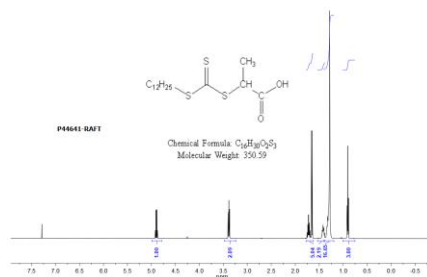
Mn x 10 ³	Mw/Mn (PDI)
8.0	1.02
Dp: PtBuA ₆₆ from ¹ H NMR	

Method of Synthesis

The polymer is synthesized by RAFT polymerization process using following RAFT reagents.



¹H NMR spectrum of the Sample (CDCl₃):



THF	×	Acetone	×
CHCl ₃	×	H ₂ O	√
Toluene	×	Methanol	√

Chromatogram Plot

P45135-PtBuA-RAFT(DDMAT)

Y-axis: LS 90°

X-axis: Time (minutes)

Legend:

- Detector: LS 90°
- Solvent: C4H10

Molecular Weight Averages							
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	9065	8321	8552	8790	9004	8713	1.02

Chemical structure of the polymer: CCCCCCCCCCCCCCCCOC(=O)C1=CC=CC=C2C=CC=CC=C2C1

¹H NMR spectrum (CDCl₃) showing peaks at approximately 7.2 ppm (NH), 3.6 ppm (CH₂-O), and 1.2-1.6 ppm (CH₂).