

# Product Profile

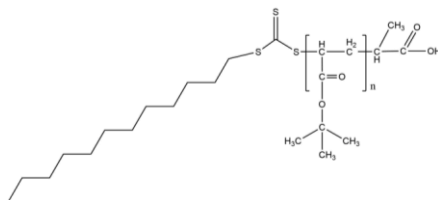
## Identification

**Product Name:** Poly(tert-butyl acrylate), ( $\omega$ -RAFT, $\alpha$ -Carboxylic acid)-terminated

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

**Product Lot Number:** P45134A-tBuACOOH-RAFT

**Product Chemical Architecture:**

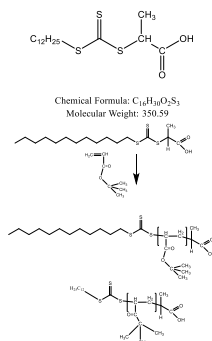


**Composition:**

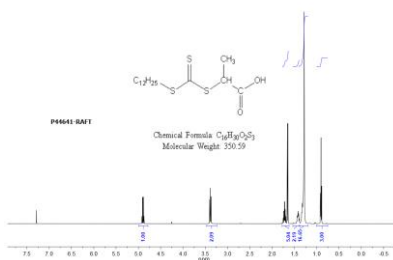
Mn x 10 <sup>3</sup>	Mw/Mn (PDI)
10.5	1.02
Dp: PtBuA <sub>82</sub> from <sup>1</sup> H NMR	

## Method of Synthesis

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



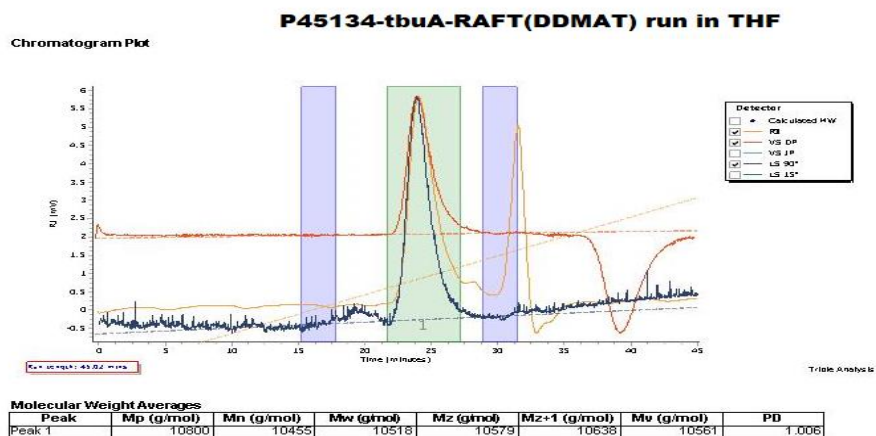
**<sup>1</sup>H NMR spectrum of the Sample (CDCl<sub>3</sub>):**



### Solubility of polymer in different solvents

THF	×	Acetone	×
CHCl <sub>3</sub>	×	H <sub>2</sub> O	√
Toluene	×	Methanol	√

### A. Gel Permeation Chromatography (GPC), SEC- Profile for PtBuA-RAFT attached



### B. NMR (HNMR) of polymer:

