

Product Profile

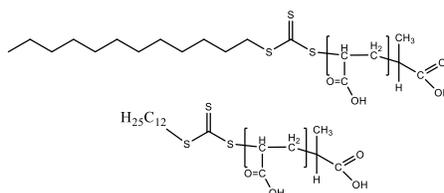
Identification

Product Name: Poly(acrylic acid),(ω -RAFT, α -Carboxylic acid)-terminated

Poly(acrylic acid), (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: P45134-AA-RAFT

Product Chemical Architecture:

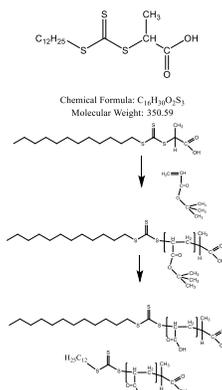


Composition:

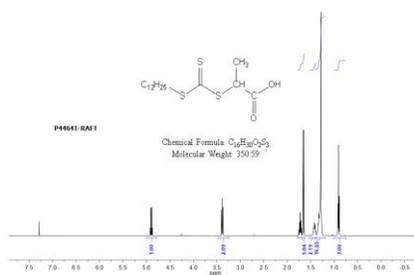
Mn x 10 ³	Mw/Mn (PDI)
8.5	1.02
Dp: PtBuA ₁₁₉ from ¹ H NMR	
Dp: PAA ₁₁₉	

Method of Synthesis

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



¹H NMR spectrum of the Sample (CDCl₃):



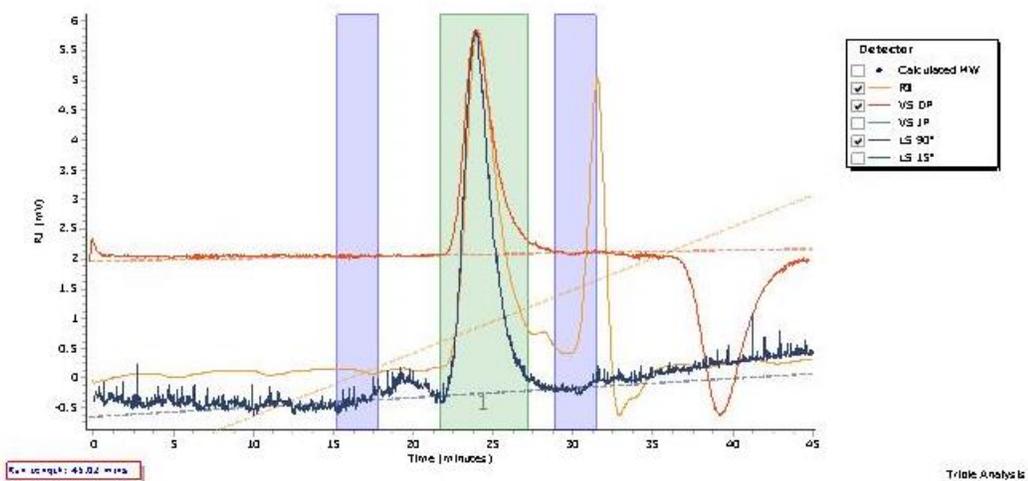
Solubility of polymer in different solvents

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

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

P45134-tbuA-RAFT(DDMAT) run in THF

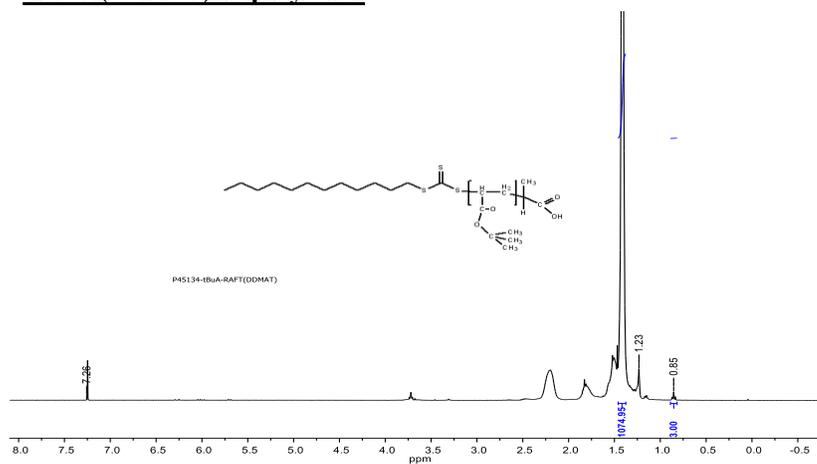
Chromatogram Plot



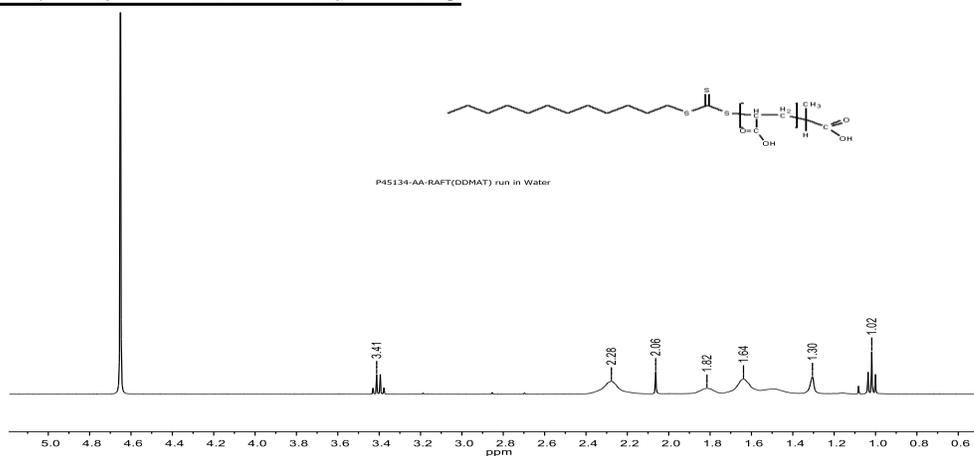
Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	10800	10455	10518	10579	10638	10561	1.006

B. NMR (HNMR) of polymer:



HNMR of PAA-DDMAT run in D2O



HNMR of PAA-DDMAT run in DMSO

