

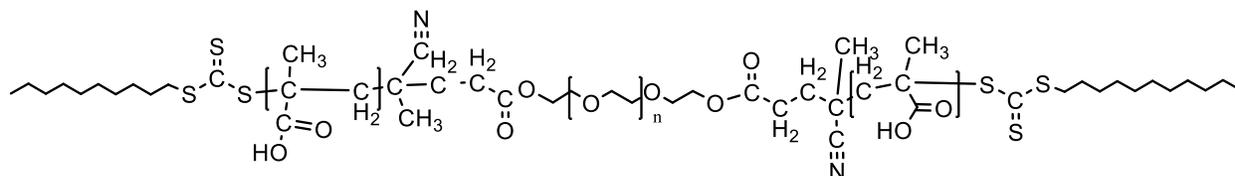
Product Profile

Identification

Product Name: Poly(methacrylic acid)-b-poly(ethylene oxide)-b-poly(methacrylic acid)

Product Lot Number: P44569A-MAAEOMAA

Product Chemical Architecture:



Composition:

MAA-EO-MAA Mn * 10 ³ (g/mol)	Mw/Mn (PDI)
3.5-b-4.0-b-3.5	1.18
Dp of each block: MAA ₄₀ -EO ₉₁ -MAA ₄₀ from ¹ H NMR	

Method of Synthesis

The polymer is synthesized by RAFT polymerization process.

Solubility in different solvents

THF	√	DMF	√
CHCl ₃	X	CHCl ₃	X
Water	X	Water-pH 7-9	√

Purification of Polymer

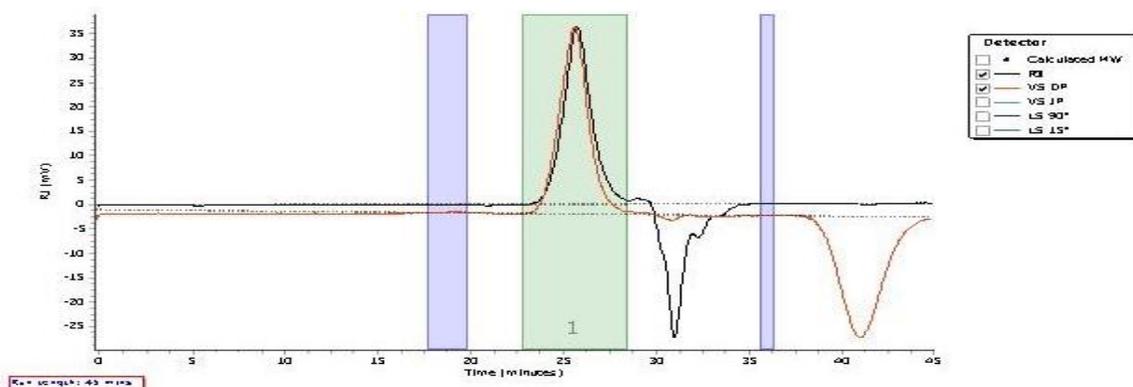
The polymer has been purified to remove unreacted PEG by stirring in Hot Water.

Validation of Architecture

A. Gel Permeation Chromatography (GPC), SEC- PEG

Chromatogram Plot

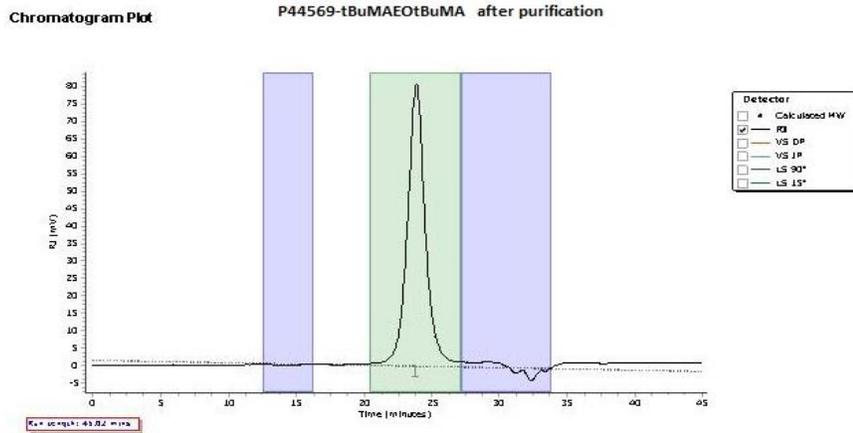
PEG-2RAFT Mn 4000



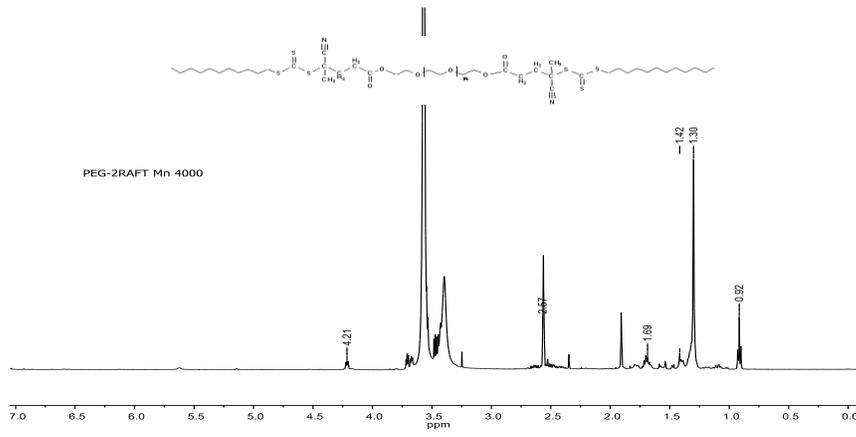
Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	4361	3910	4508	5138	5810	5003	1.153

B. SEC of Poly tBuMA-b-Ethylene Oxide-tBuMA:



C. HNMR spectrum of PEG- α - ω -RAFT:



D. HNMR spectrum of PMAA-b-EO-PMAA run in DMSO:

