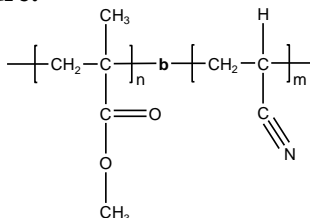


Sample Name:
Poly (Methylmethacrylate-b-Acrylonitrile)

Sample #: P41244-MMAACN
PMMA block rich in Syndiotactic fraction

Structure:



Composition:

| | |
|-----------------------------------|-------------|
| Mn × 10 ³ MMA-b-ACN | Mw/Mn (PDI) |
| 11.0-b-12.0 | 1.37 |

Color of the Product: light yellow

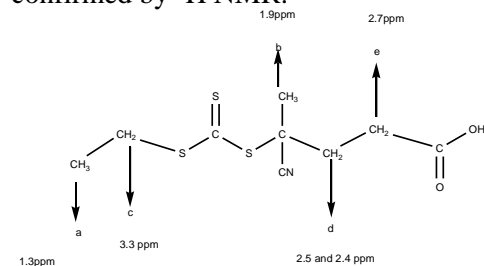
Synthesis Procedure:

The polymer is prepared by RAFT polymerization process. PACN-RAFT macroinitiator prepared in ethylene carbonate as solvent.

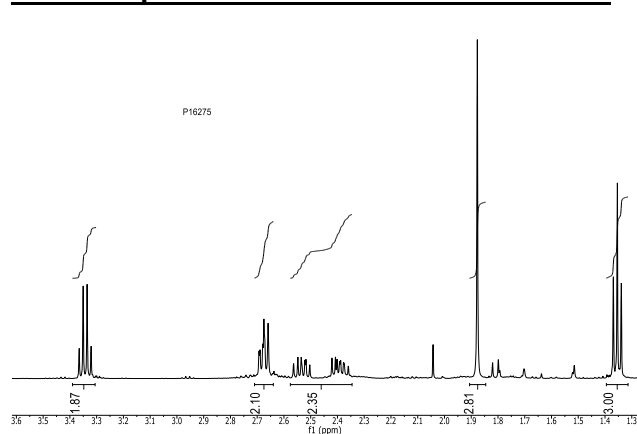
Following RAFT catalyst used:

Structure:

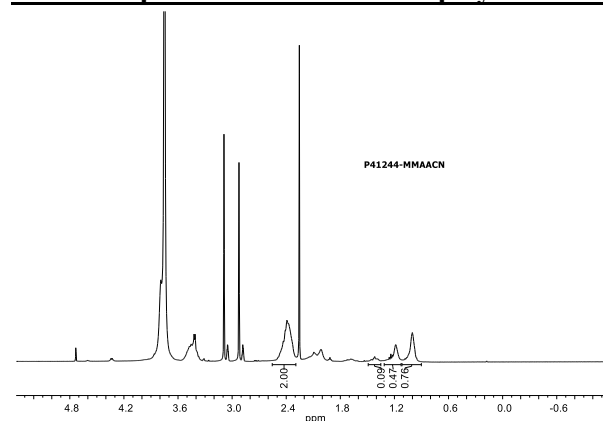
The structure of product was characterized and confirmed by ¹H NMR.



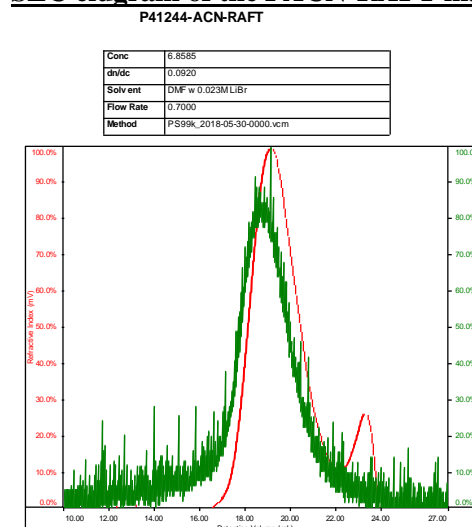
¹H NMR spectrum of the RAFT macroinitiator:



¹H NMR spectrum of the Block copolymer in DMF:

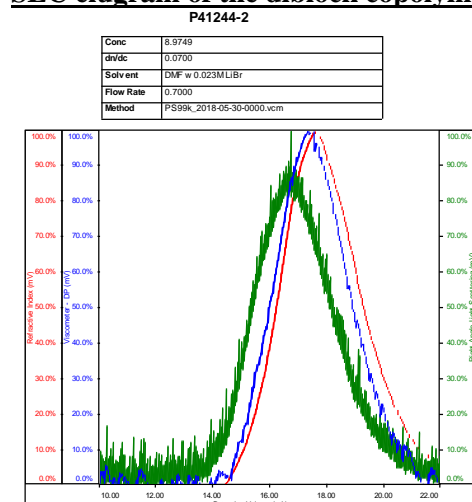


SEC elugram of the PACN-RAFT macroinitiator:



| Sample | Mn | Mw | Mp | Mw/Mn | IV |
|---------------------|--------|--------|--------|-------|--------|
| P41244-ACNBr_01.vdt | 12,174 | 18,223 | 16,999 | 1.497 | 0.3268 |

SEC elugram of the diblock copolymer:



| Sample | Mn | Mw | Mp | Mw/Mn | IV |
|----------------------|--------|--------|--------|-------|--------|
| P41244-MMAACN_01.vdt | 21,385 | 29,245 | 23,715 | 1.368 | 0.5870 |