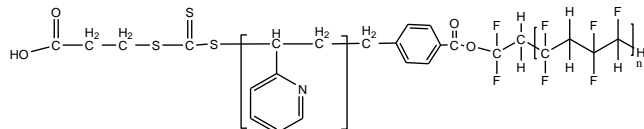


Sample Name:

Poly(vinylidene difluoride-co-trifluoroethylene(about 25 %))-b-poly(2-vinyl pyridine)

Sample #: **P41191A-VDFTFEran-2VP**

Structure:



Composition:

Mn x 10 ³	PDI
34.0-b-40.0	1.19
Composition by HNMR	

Synthesis:

The polymer was synthesized by radical polymerization process using 4-chloromethyl benzoyl peroxide as an initiator.

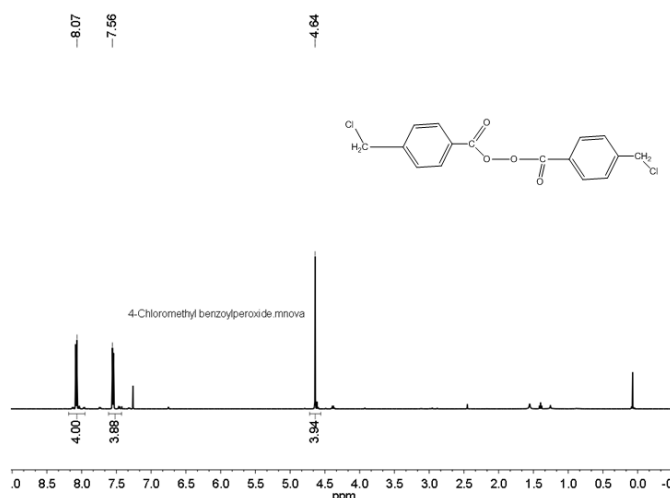
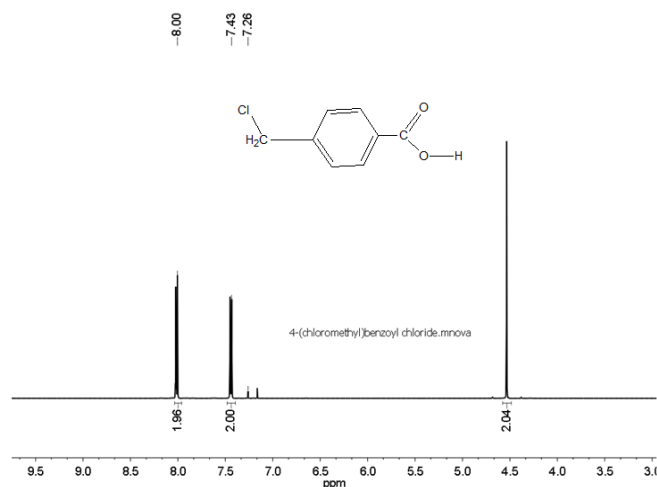
Characterization:

The product was characterized by size exclusion chromatography (SEC) runs in DMF as an eluant and ¹H NMR runs in Acetone.

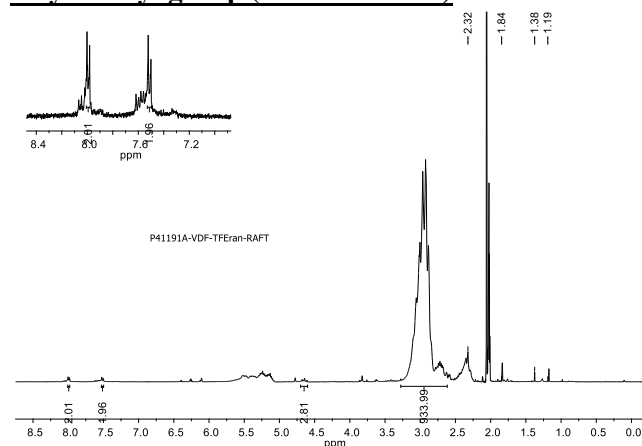
Solubility:

The polymer is soluble in dimethylformamide (DMF), Acetone and in THF.

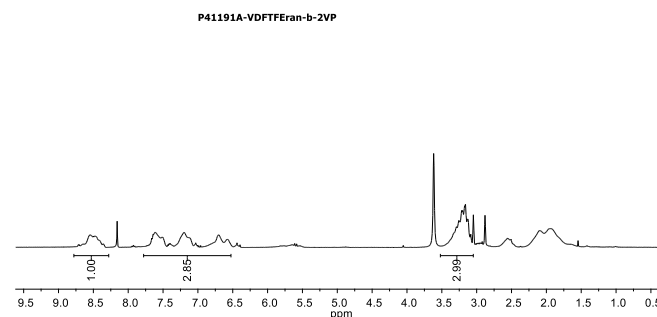
¹H NMR spectrum of the initiator and its precursor:



¹H NMR spectrum of the PVDFTFE ran terminated vinyl benzyl group (macroinitiator):



¹H NMR spectrum of the Sample:

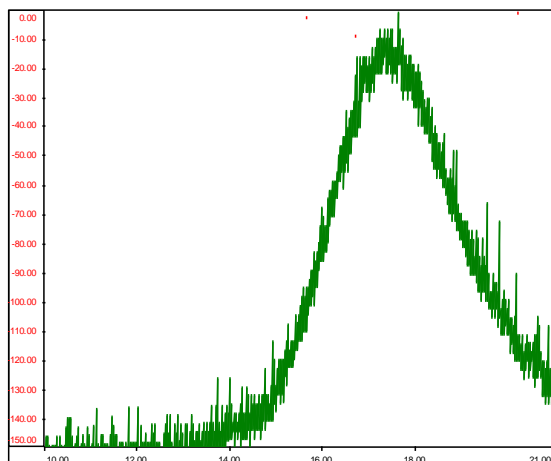


SEC elugram of Macroinitiator of VDF and TFE random copolymer:

RI signal negative due to negative values of dn/dc

P41191-VDF-TFEran

Conc	0.2907
dn/dc	0.1650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS99k_2018-05-30-0000.vcm



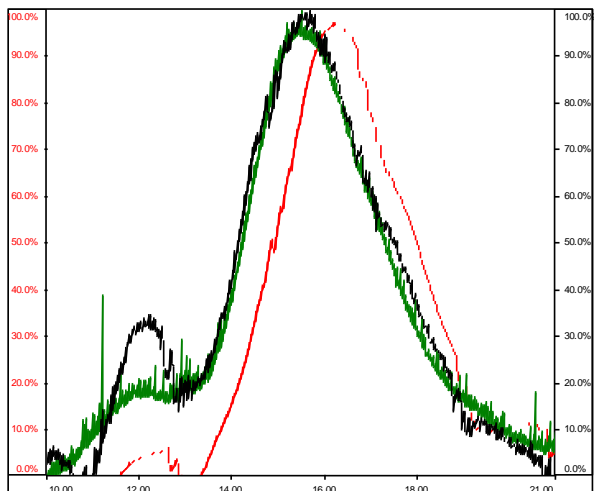
Sample	Mn	Mw	Mp	Mw/Mn	IV
P41191-VDFTFE_01.vdt	34,119	33,744	29,695	0.989	4.6062

SEC elugram of the Sample:

Block copolymer showing RI signal (negative disappear
showing formation of block copolymer)

P41191A-VDFTFE-2VP

Conc	1.0687
dn/dc	0.1440
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS99k_2018-05-30-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P41191A-2_VDFTFE-2VP_01.vdt	73,948	88,511	69,892	1.197	1.7402