

Synonym: Poly Cyclohexyl ethylene-*b*-4Vinylpyridine

CC(C)CC(C)(C1CCCCC1)CC(C)(C2=CC=CC=N2)CC(C)C

M _n x 10 ³	PDI
12.5-b-49.0	1.30

CC(C)C(C)(C)[CH2]nCC(=O)OC(C)(C)S=C(S)CCCCCCCCCCC

Polymer is soluble in toluene (not clear solution), CHCl_3 , THF and DMF depending on the ratio of PVCH and P4VP block.

[illegible]

Chemical structure of **OR421-F1** is shown above the spectrum. The structure is a long-chain alkyl thioester derivative: $\text{CH}_3(\text{CH}_2)_{19}\text{CH}_2\text{S-C(=S)-S-C(CH}_3)_2\text{COOH}$.

The ^1H NMR spectrum (400 MHz, CDCl_3) displays the following peaks (ppm) and integrations:

Peak (ppm)	Integration
~1.3	1.896
~1.3	0.131
~1.7	2.090
~1.7	5.455
~2.1	2.109
~1.3	16.381
~3.0	3.000

1H NMR spectrum of P16164-VCH-RAFT in CDCl₃. The spectrum shows a large solvent peak at 7.26 ppm (CDCl₃), a small peak at 4.13 ppm, a small peak at 3.27 ppm, a small peak at 2.56 ppm, and a complex multiplet between 1.0 and 2.0 ppm. The x-axis is labeled 'ppm' and ranges from 7.5 to 0.5. The sample name 'P16164-VCH-RAFT' is printed in the center of the spectrum.

[illegible]

Reference:

Synthesis and thermal properties of
poly(vinylcyclohexane)-*b*-poly(4-vinylpyridine) diblock
copolymers prepared via RAFT polymerization

**Yinghua Qi, Iryna I. Perepichka, Zhengji Song and
Sunil K. Varshney**

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