

Molecules **1998**, *3*, M69

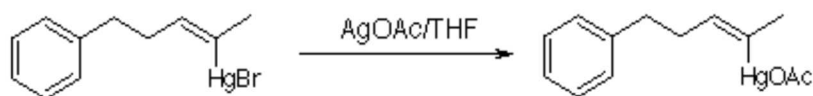
[(Z)-5-Phenyl-2-penten-2-yl]mercury Acetate

Martin J. Stoermer* and John T. Pinhey

Division of Organic Chemistry, School of Chemistry F11, The University of Sydney, N.S.W 2006, Australia.

* Current address: Victorian College of Pharmacy, Monash University (Parkville Campus), 381 Royal Parade, Parkville, Victoria 3052, Australia. Phone: +61 3 990 39000, Fax: +61 3 99039582, e-mail: martin.stoermer@vcp.monash.edu.au, <http://synapse.vcp.monash.edu.au/martin/>

Received: 27 February 1998 / Published: 6 March 1998



The general part of the experimental section [1] has been presented elsewhere. To a stirred solution of (Z)-5-phenyl-2-penten-2-ylmercury bromide (3 mmol) in dry tetrahydrofuran (40 ml) was added silver acetate (3 mmol) and the mixture was stirred at room temperature in the dark for 16 hours, filtered through Celite^(TM) and the solvent was removed. The crude product was recrystallised from cyclohexane/light petroleum to yield (Z)-5-phenyl-2-penten-2-ylmercury acetate (78%) as colourless plates.

M.p. 85°

Anal. calc. for C₁₃H₁₆HgO₂ (404.85): C 38.6, H 4.0; found: C 38.9, H 4.1.

UV (ethanol) 217sh (4180) nm.

IR (film) 2941, 1628(s), 1605(s, C=O), 1368(s), 1317(s) cm⁻¹.

¹H-NMR (400 MHz, CDCl₃) 1.94 (3H, bs, *J*_{199Hg,H} 191 Hz, CH₃), 2.04 (3H, s, OCO₂CH₃), 2.46 (2H, dt, *J* 7.3, 7.1 Hz, CH₂), 2.71 (2H, bt, *J* 7.1 Hz, Ph-CH₂), 6.01 (1H, tq, *J* 7.3, 1.7 Hz, *J*_{199Hg,H} 549 Hz, =CH), 7.13-7.31 (5H, m, ArH).

¹³C-NMR (15 MHz, CDCl₃) 23.38, 26.49 (CH₃), 35.91, 37.92 (CH₂), 126.0, 128.4, 128.8 (ArCH), 136.7 (=CH), 141.0 (quat), 142.7 (quat), 177.3 (C=O).

EI-MS 406(M⁺, <1%), 347(M⁺-OAc, <1%), 146(16), 145(86), 144(56), 129(43), 117(20), 104(33), 92(15), 91(100), 77(10), 65(19).

Acknowledgment: The authors gratefully acknowledge financial support from the Australian Research Council and The University of Sydney.

References and Notes

1. Moloney, M.G.; Pinhey, J.T.; Stoermer, M.J. "Vinyl Cation Formation by Decomposition of Vinyl-lead Triacetates. The reactions of Vinylmercury and Vinyltin Compounds with Lead Tetraacetate." *J. Chem. Soc. Perkin Trans. 1* **1990**, *10*, 2645.

Sample Availability: No sample available.

©1998 MDPI. All rights reserved. *Molecules* website <http://www.mdpi.org/molecules/>