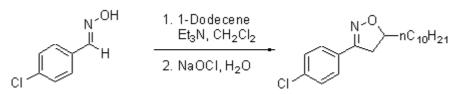
Molecules **1999**, *4*, M124

4,5-Dihydro-3-(4-chlorophenyl)-5-decylisoxazole

Bruce A. Hathaway and Ryan A. Mueller

Department of Chemistry, Southeast Missouri State University, MS 6400, One University Plaza, Cape Girardeau, Missouri, 63701, USA. Tel. 001 573-651-2370; Fax 001 573-986-6433; E-mail: <u>bahathaway@semovm.semo.edu</u>

Received: 22 October 1999 / Accepted: 1 November 1999 / Published: 23 November 1999



To a solution of 4-chlorobenzaldehyde oxime (0.40g) in CH₂Cl₂ (10 mL) in a large test-tube were added 1.0 mL of 1-dodecene and 3 drops of triethylamine. The solution was cooled to 5°C, then 7.0 mL of 5% NaOCl solution in water was added in small portions. After each portion was added, the test-tube was agitated with a VibromixerTM stirrer for 15 seconds. After the addition of all of the NaOCl solution, the test-tube was agitated with a VibromixerTM stirrer for 15 seconds every 5 minutes over the next hour. The reaction mixture was allowed to stand at least overnight. The layers were separated, and the aqueous layer was extracted with CH₂Cl₂ (5 mL). The combined CH₂Cl₂ layers were evaporated to yield an off-white solid. The solid was recrystallized from methanol to yield a white powder. Yield: 0.52g (63%).

M.p. 80-81°C.

IR (KBr pellet, cm⁻¹): 2947, 2915, 2846, 1586, 1490, 1464, 1401, 1096, 1010, 892, 827, 713.

¹H-NMR (300MHz, CDCl₃, ppm): 0.88 (3H, t, J=6.7 Hz), 1.25-1.80 (18 H, multiplets), 2.93 (1H, d of d, J=16.4 Hz, J=8.2 Hz), 3.36 (1H, d of d, J=16.4 Hz, J=10.3 Hz), 4.7 (1H, m), 7.36 (2H, m), 7.59 (2H, m).

¹³C-NMR (75.5 MHz, CDCl₃, ppm): 157.4, 137.7, 130.8, 130.3, 129.7, 83.7, 41.6, 37.2, 33.8, 31.47, 31.43, 31.40, 31.32, 31.20, 27.4, 24.6, 16.0.

GC-MS (ion trap, m/e, in order of decreasing peak size): 137 (100%), 102, 50, 139, 75, 51, 249, molecular ion not detected.

References and Notes

- 1. Gingrich, H. L.; Pickering, M. J. Chem. Educ. 1991, 68, 614-615.
- 2. Bianchi, G.; De Micheli, C.; Gandolfi, R. J. Chem. Soc., Perkin Trans. 1 1972, 1711-1714.

Sample Availability: available from MDPI.

©1999 MDPI. All rights reserved. *Molecules* website <u>www.mdpi.org/molecules</u>