## 2-Methyl-5-methylmercapto-3-dimethylsulfoxymethine-7-phenyl-1,2,4-triazepine

My. Y. Ait Itto ${ }^{\mathbf{1}}$, A Hasnaoui ${ }^{1}$, A. Riahi ${ }^{2}$ and A. Huet ${ }^{3}$

${ }^{1}$ Laboratoire de chimie des substances naturelles et des Hétérocycles, Département de Chimie, Faculté des Sciences Semlalia, B.P. 2390, 40001 Marrakech-Maroc.
${ }^{2}$ Université de Reims, UFR Sciences, UMR N ${ }^{\circ}$ 6519, Réactions Sélectives et Applications, B.P. 1039, 51687 Reims Cedex 2 France. ${ }^{3}$ Laboratoire de Synthèse Organique, Université de Maine, Le Mans-France. *Phone: 2124434349, Fax: 2124437408, E-mail: aititto@ucam.ac.ma.

Received: 20 September 2000 / Accepted: 16 November 2000 / Published: 25 December 2000


All the following operations were performed under an inert atmosphere using standard vacuum line techniques. Trimethyloxosulfonium iodide ( $2,0.73 \mathrm{~g}, 3.3 \mathrm{mmol}$ ) [1] was suspended in anhydrous DMSO $(6 \mathrm{~mL})$ and sodium hydride ( $80 \%$ suspension in mineral oil, $0.1 \mathrm{~g}, 3.3 \mathrm{mmol}$ ) was added at room temperature. The mixture was vigorously stirred for 15 min and then cooled to $10^{\circ} \mathrm{C}$ before adding rapidly a solution of the $1,2,4$-triazepine $\mathbf{1}(0.3 \mathrm{~g}, 1.1 \mathrm{mmol})$ [2] in anhydrous DMSO ( 3 mL ). After stirring at room temperature during 48 hours, the reaction mixture was poured in cold water $(40 \mathrm{~mL})$ and extracted with chloroform ( $3 \times 15 \mathrm{~mL}$ ). The combined organic layers were washed with water ( $3 \times 15 \mathrm{~mL}$ ), dried over anhydrous $\mathrm{MgSO}_{4}$. The solvent was then evaporated under vacuum. The pure product $\mathbf{3}$ was obtained as an orange solid after recristallization from carbon tetrachloride ( $85 \%$ yield).

Mp.: $169-170^{\circ} \mathrm{C}$
${ }^{1} \mathrm{H}$ NMR ( $\left.\mathrm{CDCl}_{3}, 400 \mathrm{MHz}\right): 2.35\left(\mathrm{~s}, 3 \mathrm{H}, \mathrm{SCH}_{3}\right) ; 3.11\left(\mathrm{~s}, 3 \mathrm{H}, \mathrm{NCH}_{3}\right) ; 3.47\left(\mathrm{~s}, 6 \mathrm{H},\left(\mathrm{CH}_{3}\right)_{2} \mathrm{SO}\right) ; 3.71(\mathrm{~s}$, $1 \mathrm{H}, \mathrm{H}-\mathrm{C}=\mathrm{S}) ; 5.66(\mathrm{~s}, 1 \mathrm{H}, \mathrm{H}-\mathrm{C} 6) ; 7.31-7.70(\mathrm{~m}, 5 \mathrm{H}$, aromatic CH$)$.
${ }^{13} \mathrm{C}$ NMR ( $\mathrm{CDCl}_{3}, 100 \mathrm{MHz}$, assignment based on NOESY, HMBC and COSY experiments): 14.82 $\left(\mathrm{SCH}_{3}\right) ; 41.42\left(\mathrm{NCH}_{3}\right) ; 42.43\left(\left(\mathrm{CH}_{3}\right)_{2} \mathrm{SO}\right) ; 59.79(\mathrm{H}-\mathrm{C}=\mathrm{S}) ; 100.95(\mathrm{C} 6) ; 127.98 ; 128.02 ; 129.39 ; 136.85$ (aromatic C-H); 161.59 (C3); 163.18 (C7); 164.76 (C6).
$\mathrm{MS}_{\left.-\mathrm{EI}^{+}(\mathrm{m} / \mathrm{z}, \%): 321\left(100,[\mathrm{M}]^{+}\right), 242\left(30,\left[\mathrm{M}-\left(\mathrm{CH}_{3}\right)_{2} \mathrm{SO}\right]^{+}\right), 230\left(5,\left[\mathrm{M}-\mathrm{CH}_{3}\right)_{2} \mathrm{SOCH}\right]^{+}\right) .}$
Anal calcd. for $\mathrm{C}_{15} \mathrm{H}_{19} \mathrm{~N}_{3} \mathrm{~S}_{2} \mathrm{O}$ (321.46): C, $56.04 ; \mathrm{H}, 5.96 ; \mathrm{N}, 13.07$; found C, $55.91 ; \mathrm{H}, 6.04 ; \mathrm{N}, 13.02 \%$.

## References

1. Corey, E. J.; Chakovsky, M. J. Am. Chem. Soc. 1965, 87, 1353.
2. Ait Itto, My. Y.; Hasnaoui, A.; Riahi, A.; Lavergne, J.-P. Tetrahedron Lett. 1997, 38, 2087.

Sample availability: available from the authors and MDPI.
© 2000 MDPI. All rights reserved. Molecules website www.mdpi.org/molecules/

