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## Bis[(3-methoxycarbonyl-5-methyl pyrazol)-1-yl Thiocarbonyl] Disulfide

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This experiment is performed according to literature method [1-4]. 3(5)-Methoxycarbonyl-5(3)-pyrazole 1 (3.35 g, 0.024 mol) and triethylamine (6,65 g, 0.048 mol) in ethanol solution were cooled to 5°C under stirring, carbon disulfide (3,65 g, 0.048 mol) was added to the solution. After 1 hour of stirring, solid iodine (2,8 g, 0.022 mol) was added in portions and stirred until the colour disappeared completely. Then a methanolic solution of iodine was added dropwise until a faint colour persists. Excess of iodine was neutralized with Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> solution. The product was extracted with diethyl ether, washed thrice with water, dried over Na<sub>2</sub>SO<sub>4</sub>, filtered, and diethylether was evaporated at room temperature to give liquid compound 2.

Yield: (90%).

<sup>1</sup>H-NMR(CDCl<sub>3</sub>) d (ppm): 2,30 (s, 6H, CH<sub>3</sub>); 4,86 (s, 6H, CO<sub>2</sub>CH<sub>3</sub>); 6,53 (s, 2H, Hpy).

<sup>13</sup>C-NMR(CDCl<sub>3</sub>) d (ppm): 166 (CO<sub>2</sub>), 126 (C<sub>3</sub>), 52 (O-CH<sub>3</sub>)

 $IR\;(KBr\;,\;cm^{-1}):3200\;(-S-S-);\;1720\;(C=O);\;1240\;(C=S),\;166\;(CO_2),\quad126\;(C_3),\quad52\;(O-CH_3).$ 

 $MS (m/z): 430 [M]^+$ 

U.V.:  $l_{max} = 290 \text{ nm (-C=S)}$ .

## References

- 1. Jones, R. G.; Hanret, M. J.; Lauglin, K. M. J. Org. Chem. 1954, 19, 1428.
- 2. Haque, S. A.; Clouet, G. Makromol. Chem. Phys. 1994, 195, 315-327.
- 3. Reiser, A. Photoreactive Polymer. The Science and Technology of Resist; Wiley: New York, 1986, p. 26.
- 4. El Idrissi, A.; Tebbji, K.; Radi, S. *Molecules* **2001**, 6, M232.

Sample Availability: Available from the authors and from MDPI.

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1 von 1 24.04.2009 16:01