

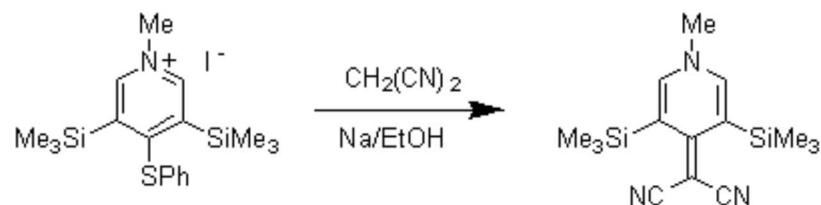
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### [3,5-Bis(trimethylsilyl)-1-methyl-4(1*H*)-pyridinylidene]-dicyanomethane

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3,5-Bis(trimethylsilyl)-1-methyl-4-thiophenoxypyridinium iodide reacts with the anion of malononitrile to give the corresponding dicyanomethylidene-1,4-dihydropyridine. The product was evaluated for its potential as a material for use in non-linear optics.

To a solution of ethanolic sodium ethoxide [prepared from sodium metal (33 mg, 1.43 mmol) and ethanol (10 mL)] was added malononitrile (94 mg, 1.42 mmol), the mixture stirred for 30 min and then 3,5-bis(trimethylsilyl)-1-methyl-4-thiophenoxypyridinium iodide [1] (670 mg, 1.42 mmol) added. The solution was refluxed for 1 h, cooled and the resulting precipitate recovered by filtration, and washed, firstly with water (10 mL), and then with isopropanol (10 mL) to give a pale yellow solid (308 mg, 72%). Recrystallisation from ethanol afforded pale yellow microcrystals.

M.p. 230-232 °C.

MS: Found:  $MH^+$   $m/z$  302.15185  $C_{15}H_{23}N_3Si_2$  requires  $MH^+$   $m/z$  302.15033  $D = 1.5$  p.p.m

$^1H$  NMR (300 MHz,  $d_6$ -DMSO): d 0.20, s, 18H; 3.62, s, 3H; 7.51, s, 2H.

$^{13}C$  NMR (75 MHz,  $d_6$ -DMSO): d 0.0 (CH<sub>3</sub>), 41.7 (CH<sub>3</sub>), 50.6 (C<sub>Q</sub>), 118.6 (C<sub>Q</sub>), 120.3 (C<sub>Q</sub>), 143.7 (CH), 162.7 (C<sub>Q</sub>).

Anal. Calc for  $C_{15}H_{23}N_3Si_2$  C 59.75, H 7.69, N 13.94. Found C 59.61, H 7.47, N 14.01.

IR (nujol): 2189, 1609, 1439, 1250, 1224, 847.

$I_{max}$  374 (methanol)  $\log_{10}e4.49$ ; 380 (pyridine)  $\log_{10}e4.47$ .

#### Reference

1. Kay, A. J.; Woolhouse, A. D. *Molecules* **2001**, *6*, M265.

*Sample Availability:* Available from the authors and from MDPI.

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