



as dimethyl sulfoxide at room temperature yields the sodium *N*-aryldithiocarbamates **2** which are converted, without previous isolation, into the methyl *N*-aryldithiocarbamates **3** by reaction with methyl iodide.

Melting points were determined using a Mettler FP-61 automatic apparatus. Mass spectra were recorded with a Hewlett-Packard 5930-A spectrometer. I.R. spectra were recorded with a Perkin-Elmer 283 instrument. ¹H-N.M.R. spectra were obtained with a Perkin-Elmer R-12 spectrometer.

Methyl *N*-Aryldithiocarbamates; General Procedure:

To a vigorously stirred solution of the aniline **1** (0.2 mol) in dimethyl sulfoxide (100 ml) at room temperature, aqueous 20 molar sodium hydroxide (12 ml) and carbon disulfide (16 ml, 0.26 mol) are added. After 30 min, methyl iodide (35.45 g, 0.25 mol) is added dropwise under cooling with an ice bath. Stirring is continued for 2 h and the mixture then poured into water (1000 ml). The precipitated product **3** is isolated by suction and recrystallized from ethanol.

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Table. Methyl *N*-Aryldithiocarbamates (**3**)

R	Yield [%]	m.p. [°C]	Molecular formula ^a or m.p. [°C] reported	M.S. <i>m/e</i> (M ⁺) (rel. int., %)	I.R. (Nujol) [cm ⁻¹] ν_{NH} $\nu_{\text{C=S}}$	¹ H-N.M.R. (DMSO- <i>d</i> ₆ / TMS) δ_{NH} [ppm]	
H	89 (82) ⁶	90.4°	94–95° ⁶	183 (37)	3110	1030	11.2
2-H ₃ C	86 (84) ⁶	138.7°	140–141° ⁶	197 (30)	3120	1050	11.3
3-H ₃ C	85 (82) ⁶	93.2°	91–92° ⁶	197 (33)	3110	1040	11.45
4-H ₃ C	88 (86) ⁶	83.1°	85–86° ⁶	197 (25)	3130	1050	11.8
4-(<i>n</i> -C ₄ H ₉)	69	67.6°	C ₁₂ H ₁₇ NS ₂ (239.3)	239 (13)	3125	1040	11.6
4-H ₃ CO—	88 (86) ⁶	96.5°	90° (dec) ⁶	213 (33)	3150	1020	11.5
4-H ₃ COOC—	71	210.4°	C ₁₀ H ₁₁ NO ₂ S ₂ (241.3)	241 (15)	3115	1045	11.4
2,3-di-H ₃ C	77	128.6°	C ₁₀ H ₁₃ NS ₂ (211.3)	211 (32)	3120	1045	11.25
2,4-di-H ₃ C	70	103.7°	103° ⁷	211 (56)	3110	1045	11.1
2,5-di-H ₃ C	62	105.7°	C ₁₀ H ₁₃ NS ₂ (211.3)	211 (58)	3100	1040	11.2
3,4-di-H ₃ C	72	84.3°	C ₁₀ H ₁₃ NS ₂ (211.3)	211 (37)	3120	1045	11.35
3-Cl-2-H ₃ C	55 (—) ⁸	109.8°	C ₉ H ₁₀ ClNS ₂ (231.7)	231 (16)	3110	1045	11.4
3,4-(O—CH ₂ —O)—	71	111.4°	C ₉ H ₉ NO ₂ S ₂ (227.3)	227 (15)	3120	1040	11.7
3-F ₃ C	46	72.1°	C ₉ H ₈ F ₃ NS ₂ (251.3)	251 (10)	3130	1045	11.22
4-Cl-3-F ₃ C	38	141.2°	C ₉ H ₇ ClF ₃ NS ₂ (285.7)	285 (22)	3180	1045	11.2

^a The microanalyses were in satisfactory agreement with the calculated values: C, ±0.35; H, ±0.26; N, ±0.32.