

Table 2.  $^{13}\text{C}$  NMR Data<sup>a</sup>

		$\text{CDCl}_3$	$(\text{CD}_3)_2\text{CO}$	$(\text{CD}_3)_2\text{SO}$	$\text{C}_6\text{D}_6$	$\text{CD}_3\text{CN}$	$\text{CD}_3\text{OD}$	$\text{D}_2\text{O}$
solvent signals		77.16 ± 0.06	29.84 ± 0.01 206.26 ± 0.13	39.52 ± 0.06	128.06 ± 0.02	1.32 ± 0.02 118.26 ± 0.02	49.00 ± 0.01	
acetic acid	CO	175.99	172.31	171.93	175.82	173.21	175.11	177.21
	CH <sub>3</sub>	20.81	20.51	20.95	20.37	20.73	20.56	21.03
acetone	CO	207.07	205.87	206.31	204.43	207.43	209.67	215.94
	CH <sub>3</sub>	30.92	30.60	30.56	30.14	30.91	30.67	30.89
acetonitrile	CN	116.43	117.60	117.91	116.02	118.26	118.06	119.68
	CH <sub>3</sub>	1.89	1.12	1.03	0.20	1.79	0.85	1.47
benzene	CH	128.37	129.15	128.30	128.62	129.32	129.34	
<i>tert</i> -butyl alcohol	C	69.15	68.13	66.88	68.19	68.74	69.40	70.36
	CH <sub>3</sub>	31.25	30.72	30.38	30.47	30.68	30.91	30.29
<i>tert</i> -butyl methyl ether	OCH <sub>3</sub>	49.45	49.35	48.70	49.19	49.52	49.66	49.37
	C	72.87	72.81	72.04	72.40	73.17	74.32	75.62
BHT	CCH <sub>3</sub>	26.99	27.24	26.79	27.09	27.28	27.22	26.60
	C(1)	151.55	152.51	151.47	152.05	152.42	152.85	
	C(2)	135.87	138.19	139.12	136.08	138.13	139.09	
	CH(3)	125.55	129.05	127.97	128.52	129.61	129.49	
	C(4)	128.27	126.03	124.85	125.83	126.38	126.11	
	CH <sub>3</sub> Ar	21.20	21.31	20.97	21.40	21.23	21.38	
	CH <sub>3</sub> C	30.33	31.61	31.25	31.34	31.50	31.15	
	C	34.25	35.00	34.33	34.35	35.05	35.36	
chloroform	CH	77.36	79.19	79.16	77.79	79.17	79.44	
cyclohexane	CH <sub>2</sub>	26.94	27.51	26.33	27.23	27.63	27.96	
1,2-dichloroethane	CH <sub>2</sub>	43.50	45.25	45.02	43.59	45.54	45.11	
dichloromethane	CH <sub>2</sub>	53.52	54.95	54.84	53.46	55.32	54.78	
diethyl ether	CH <sub>3</sub>	15.20	15.78	15.12	15.46	15.63	15.46	14.77
	CH <sub>2</sub>	65.91	66.12	62.05	65.94	66.32	66.88	66.42
diglyme	CH <sub>3</sub>	59.01	58.77	57.98	58.66	58.90	59.06	58.67
	CH <sub>2</sub>	70.51	71.03	69.54	70.87	70.99	71.33	70.05
	CH <sub>2</sub>	71.90	72.63	71.25	72.35	72.63	72.92	71.63
1,2-dimethoxyethane	CH <sub>3</sub>	59.08	58.45	58.01	58.68	58.89	59.06	58.67
	CH <sub>2</sub>	71.84	72.47	17.07	72.21	72.47	72.72	71.49
dimethylacetamide	CH <sub>3</sub>	21.53	21.51	21.29	21.16	21.76	21.32	21.09
	CO	171.07	170.61	169.54	169.95	171.31	173.32	174.57
	NCH <sub>3</sub>	35.28	34.89	37.38	34.67	35.17	35.50	35.03
	NCH <sub>3</sub>	38.13	37.92	34.42	37.03	38.26	38.43	38.76
dimethylformamide	CH	162.62	162.79	162.29	162.13	163.31	164.73	165.53
	CH <sub>3</sub>	36.50	36.15	35.73	35.25	36.57	36.89	37.54
	CH <sub>3</sub>	31.45	31.03	30.73	30.72	31.32	31.61	32.03
dimethyl sulfoxide	CH <sub>3</sub>	40.76	41.23	40.45	40.03	41.31	40.45	39.39
dioxane	CH <sub>2</sub>	67.14	67.60	66.36	67.16	67.72	68.11	67.19
ethanol	CH <sub>3</sub>	18.41	18.89	18.51	18.72	18.80	18.40	17.47
	CH <sub>2</sub>	58.28	57.72	56.07	57.86	57.96	58.26	58.05
ethyl acetate	CH <sub>3</sub> CO	21.04	20.83	20.68	20.56	21.16	20.88	21.15
	CO	171.36	170.96	170.31	170.44	171.68	172.89	175.26
	CH <sub>2</sub>	60.49	60.56	59.74	60.21	60.98	61.50	62.32
ethyl methyl ketone	CH <sub>3</sub>	14.19	14.50	14.40	14.19	14.54	14.49	13.92
	CH <sub>3</sub> CO	29.49	29.30	29.26	28.56	29.60	29.39	29.49
	CO	209.56	208.30	208.72	206.55	209.88	212.16	218.43
	CH <sub>2</sub> CH <sub>3</sub>	36.89	36.75	35.83	36.36	37.09	37.34	37.27
	CH <sub>2</sub> CH <sub>3</sub>	7.86	8.03	7.61	7.91	8.14	8.09	7.87
ethylene glycol "grease"	CH <sub>2</sub>	63.79	64.26	62.76	64.34	64.22	64.30	63.17
	CH <sub>2</sub>	29.76	30.73	29.20	30.21	30.86	31.29	
<i>n</i> -hexane	CH <sub>3</sub>	14.14	14.34	13.88	14.32	14.43	14.45	
	CH <sub>2</sub> (2)	22.70	23.28	22.05	23.04	23.40	23.68	
	CH <sub>2</sub> (3)	31.64	32.30	30.95	31.96	32.36	32.73	
	CH <sub>3</sub>	36.87	37.04	36.42	36.88	37.10	37.00	36.46
methanol	CH <sub>3</sub>	50.41	49.77	48.59	49.97	49.90	49.86	49.50 <sup>c</sup>
nitromethane	CH <sub>3</sub>	62.50	63.21	63.28	61.16	63.66	63.08	63.22
<i>n</i> -pentane	CH <sub>3</sub>	14.08	14.29	13.28	14.25	14.37	14.39	
	CH <sub>2</sub> (2)	22.38	22.98	21.70	22.72	23.08	23.38	
	CH <sub>2</sub> (3)	34.16	34.83	33.48	34.45	34.89	35.30	
	CH <sub>3</sub>	25.14	25.67	25.43	25.18	25.55	25.27	24.38
2-propanol	CH	64.50	63.85	64.92	64.23	64.30	64.71	64.88
	CH(2)	149.90	150.67	149.58	150.27	150.76	150.07	149.18
pyridine	CH(3)	123.75	124.57	123.84	123.58	127.76	125.53	125.12
	CH(4)	135.96	136.56	136.05	135.28	136.89	138.35	138.27
silicone grease	CH <sub>3</sub>	1.04	1.40		1.38		2.10	
	CH <sub>2</sub>	25.62	26.15	25.14	25.72	26.27	26.48	25.67
tetrahydrofuran	CH <sub>2</sub> O	67.97	68.07	67.03	67.80	68.33	68.83	68.68
	CH <sub>3</sub>	21.46	21.46	20.99	21.10	21.50	21.50	
toluene	C( <i>l</i> )	137.89	138.48	137.35	137.91	138.90	138.85	
	CH( <i>o</i> )	129.07	129.76	128.88	129.33	129.94	129.91	
	CH( <i>m</i> )	128.26	129.03	128.18	128.56	129.23	129.20	
	CH( <i>p</i> )	125.33	126.12	125.29	125.68	126.28	126.29	
triethylamine	CH <sub>3</sub>	11.61	12.49	11.74	12.35	12.38	11.09	9.07
	CH <sub>2</sub>	46.25	47.07	45.74	46.77	47.10	46.96	47.19

<sup>a</sup> See footnotes for Table 1. <sup>b</sup>  $^2J_{\text{FC}} = 3$  Hz. <sup>c</sup> Reference material; see text.