

Table 4.A.1: Commonly Used Deuterated Solvents^a

Adapted from the AM Series User's Manual (4-6)

Name	formula	¹ H (ppm) *	Multiplicity*	¹³ C (ppm)	Multiplicity
Acetone-d ₆	CD ₃ COCD ₃	2.04	Quintet (5)	29.8 (¹³ CD ₃ 's) 206 (¹³ C=O)	(13) 7
Benzene-d ₆	C ₆ D ₆	7.15	1 (broad)	128.0	3
Chloroform-d	CDCl ₃	7.24	1	77.0	3
D ₂ O	D ₂ O	4.60 / 4.79 ^c	1	----	----
DMSO-d ₆	CD ₃ SOCD ₃	2.49	5	39.5	7
MeOH-d ₄	CD ₃ OD	4.78 (O ¹ H) 3.30 ^b (C ¹ HD ₂)	1 5 ^b	49.0	7
Methylene Chloride-d ₂	CD ₂ Cl ₂	5.32	3	53.8	5
Pyridine-d ₅	C ₅ D ₅ N	8.71 7.55 7.19	1 (broad) 1 (broad) 1 (broad)	149.9 135.5 123.5	3 3 3
THF	(CD ₂) ₄ O	3.58 ^b -O-C ¹ HD-CD ₂ - 1.73 ^b -CD ₂ -C ¹ HD-CD ₂	1 (broad) 1 (broad)	67.4 ^b -O- ¹³ CD ₂ - CD ₂ - 25.3 ^b -CD ₂ - ¹³ CD ₂ - CD ₂	5 1 (broad)
Toluene-d ₈	Ph-CD ₃	6.98 to 7.09 (Ph) 2.09 ^a (C ¹ HD ₂)	1 5	137.5 ^b (> ¹³ C-CD ₃) 125-129 ^b (o,m,p) 20.4 ^b (¹³ CD ₃)	1 3 7

* of residual proton signal in deuterated solvent

^a relative to TMS = 0 ppm CHEMICAL SHIFTS CAN VARY WITH **SOLUTE**, **CONCENTRATION**, AND **TEMPERATURE**.^b Merck & Co., Inc. Isotopes, Handy Reference Data^c *J Org Chem* 62:7513-7514 (1997) (Tables 1 & 2, includes J couplings)SEE ALSO http://riodb.ibase.aist.go.jp/sdbs/cgi-bin/cre_index.cgi?lang=eng