

Diffusion coefficient of ethane-1,2-diol-d2 in methanol-d4

3 Diffusion in Liquid Mixtures

3.1. Data

3.1.1. Diffusion in Binary Mixtures

C2 D2 H4 O2	(1)	ethane-1,2-diol-d2	2219-52-5
C D4 O	(2)	methanol-d4	811-98-3
Intradiffusion Coefficient: $D_{1T}(T)$; Method: NMR FG			Ref.: [1969N5]
Equation: $D = A \cdot \exp[-B/T]$			Range: $263 < T/K < 353$
Comment: error: $\pm 5\%$			
Parameter:	x_1	$A \cdot 10^6$	B
	1.000	2.79	-3075
	0.937	2.48	-2983
	0.841	3.61	-3067
	0.742	3.31	-2949
	0.603	3.36	-2855
	0.520	3.92	-2818
	0.374	1.85	-2488
	0.326	1.28	-2339
	0.204	1.35	-2212
	0.115	0.49	-1852

Symbols and Abbreviations

Short Form	Full Form
D	diffusion coefficient
p	pressure
T	temperature
x_i	mole fraction
NMR FG	NMR spin echo field gradient

References

[1969N5] Nothnagel, K. H., Weiss, A.: Ber. Bunsen-Ges. Phys. Chem. **73** (1969) 1033–1040.