

Diffusion coefficient of 2-methylpropyl-benzene in dodecadeutero-cyclohexane

3 Diffusion in Liquid Mixtures

3.1. Data

3.1.1. Diffusion in Binary Mixtures

C ₁₀ H ₁₄	(1)	2-methylpropyl-benzene	538-93-2
C ₆ D ₁₂	(2)	dodecadeutero-cyclohexane	1735-17-7
Mutual Diffusion Coefficient: $D_{12}(x_i)$; $T = 298.15$ K; Method: FRS			Ref.: [2006W1]
x_1	p [kPa]	$D \cdot 10^9$ [m ² /s]	
0.20	101.32	$1.19 \pm 5\%$	
0.41	101.32	$1.24 \pm 5\%$	
0.68	101.32	$1.31 \pm 5\%$	
Comment: extracted from graphics			

Symbols and Abbreviations

Short Form	Full Form
D	diffusion coefficient
p	pressure
T	temperature
FRS	forced Rayleigh scattering
x_i	mole fraction

References

[2006W1] Wittko G., Koehler, W.: Eur. Phys. J. E **21** (2006) 283–291.