

Diffusion coefficient of 1,4-dimethyl-benzene in heptane at infinite dilution

3 Diffusion in Liquid Mixtures

3.1. Data

3.1.2. Diffusion in Binary Mixtures at Infinite Dilution

C ₈ H ₁₀	(1)	1,4-dimethyl-benzene	106-42-3
C ₇ H ₁₆	(2)	heptane	142-82-5
Diffusion Coefficient at infinite dilution: $p = 101.325$ kPa; Method: TAYLOR			Ref.: [1996Q2]
T [K]	Type	$D \cdot 10^9$ [m ² /s]	
303.2 ± 0.1	$D^0_{1(2)}$	3.50 ± 5%	
313.2 ± 0.1	$D^0_{1(2)}$	3.92 ± 5%	
323.2 ± 0.1	$D^0_{1(2)}$	4.30 ± 5%	
333.2 ± 0.1	$D^0_{1(2)}$	4.68 ± 5%	

Symbols and Abbreviations

Short Form	Full Form
D	diffusion coefficient
p	pressure
T	temperature
TAYLOR	Taylor dispersion technique

References

[1996Q2] Qian R., Fan, Y., Shi, M., Shi, J.: Chin. J. Chem. Eng. **4** (1996) 203–208.