

Diffusion coefficient of heptane in dimethyl-sulfoxide

3 Diffusion in Liquid Mixtures

3.1. Data

3.1.1. Diffusion in Binary Mixtures

| | | | |
|--|-----------|------------------------------------|----------------|
| C ₇ H ₁₆ | (1) | heptane | 142-82-5 |
| C ₂ H ₆ O S | (2) | dimethyl-sulfoxide | 67-68-5 |
| Mutual Diffusion Coefficient: $D_{12}(x_i)$; $T = 298.15 \pm 0.1$ K; Method: TAYLOR | | | Ref.: [1985P2] |
| x_1 | p [kPa] | $D \cdot 10^9$ [m ² /s] | |
| 0.0020 | 101.32 | $0.722 \pm 3.7\%$ | |
| 0.9968 | 101.32 | $4.539 \pm 3.2\%$ | |

Symbols and Abbreviations

| Short Form | Full Form |
|------------|-----------------------------|
| D | diffusion coefficient |
| p | pressure |
| T | temperature |
| TAYLOR | Taylor dispersion technique |
| x_i | mole fraction |

References

[1985P2] Paschke, A., J. Ptáček, Bittrich, H.-J.: Z. Phys. Chem. (Leipzig) **266** (1985) 844–848.