

# Diffusion coefficient of water in propan-2-ol at infinite dilution

## 3 Diffusion in Liquid Mixtures

### 3.1. Data

#### 3.1.2. Diffusion in Binary Mixtures at Infinite Dilution

|   |              |                                    |                |
|---|--------------|------------------------------------|----------------|
| H <sub>2</sub> O  | (1)          | water                              | 7732-18-5      |
| C <sub>3</sub> H <sub>8</sub> O   | (2)          | propan-2-ol                        | 67-63-0        |
| Diffusion Coefficient at infinite dilution: $p = 101.325$ kPa; Method: TAYLOR |              |                                    | Ref.: [1996H1] |
| $T$ [K]   | Type         | $D \cdot 10^9$ [m <sup>2</sup> /s] |                |
| 298.15  | $D_{2(1)}^0$ | $1.029 \pm 0.5\%$                  |                |
| Diffusion Coefficient at infinite dilution: $p = 101.325$ kPa; Method: DIA    |              |                                    | Ref.: [1971L4] |
| $T$ [K]   | Type         | $D \cdot 10^9$ [m <sup>2</sup> /s] |                |
| 288.15  | $D_{1(2)}^0$ | $0.38 \pm 3\%$                     |                |

### Symbols and Abbreviations

| Short Form | Full Form                   |
|------------|-----------------------------|
| $D$        | diffusion coefficient       |
| $p$        | pressure                    |
| $T$        | temperature                 |
| TAYLOR     | Taylor dispersion technique |
| DIA        | diaphragm cell              |

### References

- [1971L4] Lysis, M. A., Ratcliff, G. A.: *AIChE J.* **17** (1971) 1492–1496.  
 [1996H1] Hao, L., Leaist, D. G.: *J. Chem. Eng. Data* **41** (1996) 210–213.