

Supplementary Material

Diffusion studies of phenylenediamine isomers in water–monohydric-alcohol systems

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Table 1 The relative diffusion difference as a percentage of *o*-PDA ($D_{o\text{-PDA}}$) compared to *m*-PDA ($D_{m\text{-PDA}}$) and *p*-PDA ($D_{p\text{-PDA}}$) in mixtures of water–MeOH with mole fraction x_{MeOH} , measured at 298 K.

x_{MeOH}	$D_{o\text{-PDA}}$ greater than $D_{m\text{-PDA}}$ (%)	$D_{o\text{-PDA}}$ greater than $D_{p\text{-PDA}}$ (%)
0	1.6	2.5
0.03	-2.3	1.5
0.06	0.8	1.3
0.15	6.4	10.2
0.27	11.4	16.4
0.35	10.7	12.1
0.47	13.0	24.9
0.55	4.8	15.6
0.69	8.3	16.8
0.86	10.1	15.4
1	7.7	15.6

Table 2 The relative diffusion difference as a percentage of *o*-PDA ($D_{o\text{-PDA}}$) compared to *m*-PDA ($D_{m\text{-PDA}}$) and *p*-PDA ($D_{p\text{-PDA}}$) in mixtures of water–EtOH with mole fraction x_{EtOH} , measured at 298 K.

x_{EtOH}	$D_{o\text{-PDA}}$ greater than $D_{m\text{-PDA}}$ (%)	$D_{o\text{-PDA}}$ greater than $D_{p\text{-PDA}}$ (%)
0	1.6	2.5
0.02	0.9	2.7
0.05	5.3	6.6
0.06	4.5	4.3
0.12	5.8	10.0
0.21	5.0	12.5
0.32	12.9	19.7
0.45	8.0	15.2
0.56	8.8	18.5
0.76	8.2	18.5
0.88	3.8	15.6

Table 3 The relative diffusion difference as a percentage of *o*-PDA ($D_{o\text{-PDA}}$) compared to *m*-PDA ($D_{m\text{-PDA}}$) and *p*-PDA ($D_{p\text{-PDA}}$) in mixtures of water–1-PrOH with mole fraction $x_{1\text{-PrOH}}$, measured at 298 K.

$x_{1\text{-PrOH}}$	$D_{o\text{-PDA}}$ greater than $D_{m\text{-PDA}}$ (%)	$D_{o\text{-PDA}}$ greater than $D_{p\text{-PDA}}$ (%)
0	1.6	2.5
0.02	-1.0	0.6
0.04	0.1	6.0
0.05	-1.1	5.3
0.11	3.0	5.1
0.27	2.2	7.7
0.44	9.5	16.0
0.58	10.9	19.3
0.82	4.8	15.0
1	7.6	25.1

Table 4 The relative diffusion difference as a percentage of *o*-PDA ($D_{o\text{-PDA}}$) compared to *m*-PDA ($D_{m\text{-PDA}}$) and *p*-PDA ($D_{p\text{-PDA}}$) in mixtures of water–*t*-BuOH with mole fraction $x_{t\text{-BuOH}}$, measured at 298 K.

$x_{t\text{-BuOH}}$	$D_{o\text{-PDA}}$ greater than $D_{m\text{-PDA}}$ (%)	$D_{o\text{-PDA}}$ greater than $D_{p\text{-PDA}}$ (%)
0	1.6	2.5
0.015	-1.7	1.9
0.023	0.2	5.2
0.030	-1.3	4.1
0.053	0	5.3
0.077	-2.1	3.2
0.15	-7.8	1.6
0.26	6.7	15.1
0.38	10.1	18.7
0.51	11.9	31.7
0.78	16.1	34.3
1	8.2	30.3