SUPPLEMENTARY MATERIAL TO
Correlation of the liquid mixture viscosities

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SELECTED CORRELATION MODELS FOR THE VISCOSITIES OF LIQUID MIXTURES[*]

Dolezalek-Schulze[1]:

$$\eta_{l,m} = \sum_{i=1}^{m} x_i^2 \eta_{l,i} + \sum_{i=1}^{m}\sum_{\substack{j=1\\j\neq i}}^{m} x_i x_j A_{ij}, \quad A_{ij} = A_{ji} \tag{1}$$

Grunberg-Nissan[2]:

$$\ln(\eta_{l,m}) = \sum_{i=1}^{m} x_i \ln(\eta_{l,i}) + (1/2)\sum_{i=1}^{m}\sum_{\substack{j=1\\j\neq i}}^{m} x_i x_j A_{ij} \quad, \quad A_{ij} = A_{ji} \tag{2}$$

Tamura-Kurata[3]:

$$\eta_{l,m} = \sum_{i=1}^{m} x_i \varphi_i \eta_{l,i} + \sum_{i=1}^{m}\sum_{\substack{j=1\\j\neq i}}^{m} (x_i x_j \varphi_i \varphi_j)^{0.5} A_{ij}, \quad A_{ij} = A_{ji} \tag{3}$$

McAllister 3[4]:

$$\ln(\eta_{l,m} / \rho_{l,m}) = x_1^3 \ln(\eta_{l,1} / \rho_{l,1}) + x_2^3 \ln(\eta_{l,2} / \rho_{l,2}) + x_2^3 \ln(M_2 / M_1) -$$
$$- \ln(x_1 + x_2 M_2 / M_1) + 3x_1^2 x_2 \ln[(2 + M_2 / M_1) / 3] + \tag{4}$$
$$+ 3x_1 x_2^2 \ln[(1 + 2M_2 / M_1) / 3] + 3x_1^2 x_2 A_{12} + 3x_1 x_2^2 A_{21}$$

McAllister 4[4]:

$$\ln(\eta_{l,m} / \rho_{l,m}) = x_1^4 \ln(\eta_{l,1} / \rho_{l,1}) + x_2^4 \ln(\eta_{l,2} / \rho_{l,2}) + x_2^4 \ln(M_2 / M_1) -$$
$$- \ln(x_1 + x_2 M_2 / M_1) + 4x_1^3 x_2 \ln[(3 + M_2 / M_1) / 4] +$$
$$+ 6x_1^2 x_2^2 \ln[(1 + M_2 / M_1) / 2] + 4x_1 x_2^3 \ln[(1 + 3M_2 / M_1) / 4] + \tag{5}$$
$$+ 4x_1^3 x_2 A_{1112} + 6x_1^2 x_2^2 A_{1122} + 4x_1 x_2^3 A_{2221}$$

McAllister-Chandramouli-Laddha[5]:

$$1n(\eta_{l,m} / \rho_{l,m}) = \sum_{i=1}^{m} x_i^3 \ln(\eta_{l,i} M_i / \rho_{l,i}) - \ln(\sum_{i=1}^{m} x_i M_i) +$$
$$+ 3\sum_{i=1}^{m} \sum_{\substack{j=1 \\ j \neq i}}^{m} x_i^2 x_j \ln[\nu_{ij}(2M_i + M_j) / 3] + \tag{6}$$
$$+ 6\sum_{i=1}^{m-2} \sum_{j=i+1}^{m-1} \sum_{k=i+2}^{m} x_i x_j x_k \ln[\nu_{ijk}(M_i + M_j + M_k) / 3]$$
$$A_{ij} = \ln(\nu_{ij}), \quad A_{ijk} = \ln(\nu_{ijk})$$

Katti-Chaudhri[6]:

$$\ln(\eta_{l,m} / \rho_{l,m}) = \sum_{i=1}^{m} x_i \ln(\eta_{l,i} / \rho_{l,i}) + (1/2)\sum_{i=1}^{m} \sum_{\substack{j=1 \\ j \neq i}}^{m} x_i x_j A_{ij}, \quad A_{ij} = A_{ji} \tag{7}$$

Ausländer[7]:

$$\sum_{i=1}^{m} x_i (\sum_{j=1}^{m} A_{ij} x_j)(\eta_{l,m} - \eta_{l,i}) = 0 \tag{8}$$

Modified Wilson[8]:

$$\ln(\eta_{l,m}) = \sum_{i=1}^{m} x_i \ln(\eta_{l,i}) - \sum_{i=1}^{m} x_i \ln(x_i + \sum_{\substack{j=1 \\ j \neq i}}^{m} x_j A_{ij}) \tag{9}$$

Heric I[9]:

$$\ln(\eta_{l,m} / \rho_{l,m}) = \sum_{i=1}^{m} x_i \ln(\eta_{l,i} / \rho_{l,i}) + (1/2)\sum_{i=1}^{m}\sum_{\substack{j=1 \\ j \neq i}}^{m} x_i x_j [A_{ij} + (x_i - x_j)B_{ij}] \quad, \tag{10}$$

$$A_{ij} = A_{ji}, \quad B_{ij} = B_{ji}$$

Heric II[9]:

$$\ln(\eta_{l,m} / \rho_{l,m}) = \sum_{i=1}^{3} x_i \ln(\eta_{l,i} / \rho_{l,i}) + \sum_{i=1}^{3}\sum_{\substack{j=1 \\ j>i}}^{3} x_i x_j [A + B(x_i - x_j)] + x_1 x_2 x_3 C \tag{11}$$

Heric-Brewer I[10]:

$$\eta_{l,m} = \sum_{i=1}^{m} x_i \eta_{l,i} + (1/2)\sum_{i=1}^{m}\sum_{\substack{j=1 \\ j \neq i}}^{m} x_i x_j [A_{ij} + (x_i - x_j)B_{ij} + (x_i - x_j)^2 C_{ij}], \tag{12}$$

$$A_{ij} = A_{ji}, \quad B_{ij} = B_{ji}, \quad C_{ij} = C_{ji}$$

Heric-Brewer II[10]:

$$\ln(\eta_{l,m} / \rho_{l,m}) = \sum_{i=1}^{m} x_i \ln(\eta_{l,i} / \rho_{l,i}) + (1/2)\sum_{i=1}^{m}\sum_{\substack{j=1 \\ j \neq i}}^{m} x_i x_j [A_{ij} + (x_i - x_j)B_{ij} + \tag{13}$$

$$+ (x_i - x_j)^2 C_{ij}] \quad , \quad A_{ij} = A_{ji} \quad , \quad B_{ij} = B_{ji} \quad , \quad C_{ij} = C_{ji}$$

Krishnan-Laddha[11]:

$$\ln(\eta_{l,m} / \rho_{l,m}) = \sum_{i=1}^{m} x_i \ln(\eta_{l,1} M_i / \rho_{l,i}) - \ln(\sum_{i=1}^{m} x_i M_i) +$$
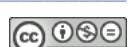
$$+ (2,303/2)\sum_{i=1}^{m}\sum_{\substack{j=1 \\ j \neq i}}^{m} x_i x_j [A_{ij} + (x_i - x_j)B_{ij}] \quad , \tag{14}$$

$$A_{ij} = A_{ji} \quad , \quad B_{ij} = B_{ji}$$

Stephan-Heckenberger[12]:

$$\ln(\eta_{l,m}) = \sum_{i=1}^{2} x_i \ln(\eta_{l,i}) + \ln\{1 + x_1 x_2 / [A + BT_m + (C + DT)x_1^2]\} \tag{15}$$

McAllister-Soliman-Marschall (McASM)[13]:

$$\ln(\eta_{l,m} \,/\, \rho_{l,m}) = \sum_{i=1}^{m} x_i^3 \ln(\eta_{l,i} \,/\, \rho_{l,i}) + 3\sum_{i=1}^{m-1}\sum_{j=i+1}^{m} x_i x_j A_{ij} +$$
$$+ \sum_{i=1}^{m-1}\sum_{j=i+1}^{m} (x_i + x_j)^3 x_i x_j B_{ij} \,/\, [(M_i \,/\, M_j)^2 x_i + x_j] + \qquad (16)$$
$$+ 6\sum_{i=1}^{m-2}\sum_{j=i+1}^{m-1}\sum_{k=i+2}^{m} x_i x_j x_k A_{ijk}$$

Mehrotra[14]:

$$\log(\eta_{l,m}[\text{mPas}] + 0,8) = \sum_{i=1}^{m} x_i (M_i \,/\, M_m)^{0,5} \log(\eta_{l,i}[\text{mPas}] + 0,8) +$$
$$+ \sum_{i=1}^{m-1}\sum_{j=i+1}^{m} x_i x_j (M_i M_j \,/\, M_m^2)^{0,5} A_{ij} \qquad (17)$$
$$M_m = \sum_{i=1}^{m} x_i M_i$$

Baylaucq-Daugé-Boned[15]:

$$\ln(\eta_{l,m}) = \sum_{i=1}^{m} x_i \ln(\eta_{l,i}) + (\sum_{i=1}^{m}\sum_{\substack{j=1 \\ j\neq i}}^{i} x_i x_j)[(A + Bp_m) \,/\, T_m][1 \,/\, (1 + C\sum_{i=1}^{m} x_i M_i)] \quad (18)$$

Dimitrov-Kamenski I[16]:

$$\eta_{l,m} = x_1 \eta_{l,1} + x_2 \eta_{l,2} + \frac{x_1 x_2 A}{x_1 + x_2 B} \qquad (19)$$

Dimitrov-Kamenski II[16]:

$$\eta_{l,m} = x_1 \eta_{l,1} + x_2 \eta_{l,2} + \frac{x_1 x_2 (A + BT_m)}{x_1 + x_2 (C + DT_m)} \qquad (20)$$

Dimitrov-Kamenski III[16]:

$$\eta_{l,m} = x_1 \eta_{l,1} + x_2 \eta_{l,2} + \frac{x_1 x_2 A + x_1 x_2 (x_1 - x_2) B}{x_1 + x_2 C + x_1 x_2 (x_1 - x_2) D} \qquad (21)$$

Dimitrov-Kamenski IV[16]:

$$\eta_{l,m} = (x_1 \eta_{l,1} + x_2 \eta_{l,2})\frac{x_1 + x_2 A}{x_1 + x_2 A + x_1 x_2 B} \qquad (22)$$

Dimitrov-Kamenski V[16]:

$$\eta_{l,m} = (x_1\eta_{l,1} + x_2\eta_{l,2})\frac{x_1 + x_2(A + BT_m)}{x_1 + x_2(A + BT_m) + x_1x_2(C + DT_m)} \quad (23)$$

Dimitrov-Kamenski VI[16]:

$$\eta_{l,m} = (x_1\eta_{l,1} + x_2\eta_{l,2})\frac{x_1 + x_2A + x_1x_2B}{x_1 + x_2A} \quad (24)$$

Dimitrov-Kamenski VII[16]:

$$\eta_{l,m} = (x_1\eta_{l,1} + x_2\eta_{l,2})\frac{x_1 + x_2(A + BT_m + CT_m^2) + x_1x_2(D + ET_m + FT_m^2)}{x_1 + x_2(A + BT_m + CT_m^2)} \quad (25)$$

Dimitrov-Kamenski VIII[16]:

$$\eta_{l,m} = (x_1\eta_{l,1} + x_2\eta_{l,2})\frac{x_1 + x_2A + x_1x_2B}{x_1 + x_2A + x_1x_2C} \quad (26)$$

Dimitrov-Kamenski IX[16]:

$$\eta_{l,m} = (x_1\eta_{l,1} + x_2\eta_{l,2})\frac{x_1 + x_2A + x_1x_2B}{x_1 + x_2A + x_1x_2(C + DT_m)} \quad (27)$$

Dimitrov-Kamenski X[16]:

$$\eta_{l,m} = (\eta_{l,1}^{x_1}\eta_{l,2}^{x_2})\frac{x_1 + x_2A + x_1x_2B}{x_1 + x_2A} \quad (28)$$

Dimitrov-Kamenski XI[16]:

$$\eta_{l,m} = (\eta_{l,1}^{x_1}\eta_{l,2}^{x_2})\frac{x_1 + x_2A + x_1x_2(B + CT_m)}{x_1 + x_2A} \quad (29)$$

Dimitrov-Kamenski XII[16]:

$$\eta_{l,m} = (\eta_{l,1}^{x_1}\eta_{l,2}^{x_2})\frac{x_1 + x_2A + x_1x_2B}{x_1 + x_2A + x_1x_2(x_1 - x_2)C} \quad (30)$$

Dimitrov-Kamenski XIII[16]:

$$\eta_{l,m} = (\eta_{l,1}^{x_1}\eta_{l,2}^{x_2})\frac{x_1 + x_2A + x_1x_2(B + CT_m)}{x_1 + x_2A + x_1x_2(x_1 - x_2)(D + ET_m)} \quad (31)$$

Modified Dimitrov-Kamenski[16]:

$$\eta_{l,m} = \eta_{l,1}^{x_1}\eta_{l,2}^{x_2}\eta_{l,3}^{x_3} +$$

$$+ \frac{x_1x_2A + x_1x_3B + x_2x_3C}{1 + x_2D + x_3E + x_1x_2(x_1 - x_2)F + x_1x_3(x_1 - x_3)G + x_2x_3(x_2 - x_3)H} \quad (32)$$

Focke-Du Plessis I[17]:

$$\eta_{l,m} = x_1\eta_{l,1} + x_2\eta_{l,2} + \frac{x_1^2 A + 2x_1 x_2 B + x_2^2 C}{x_1 + x_2 D} \tag{33}$$

Focke-Du Plessis II[17]:

$$\eta_{l,m} = x_1\eta_{l,1} + x_2\eta_{l,2} + \frac{x_1^3 A + 3x_1^2 x_2 B + 3x_1 x_2^2 C + x_2^3 D}{x_1 + x_2 E} \tag{34}$$

Focke-Du Plessis III[17]:

$$\eta_{l,m} = x_1\eta_{l,1} + x_2\eta_{l,2} + \frac{x_1^4 A + 4x_1^3 x_2 B + 6x_1^2 x_2^2 C + 4x_1 x_2^3 D + x_2^4 E}{x_1 + x_2 F} \tag{35}$$

Focke-Du Plessis IV[17]:

$$\eta_{l,m} = x_1\eta_{l,1} + x_2\eta_{l,2} + \frac{x_1 A + x_2 B}{x_1^2 + 2x_1 x_2 C + x_2^2 D} \tag{36}$$

Focke-Du Plessis V[17]:

$$\eta_{l,m} = x_1\eta_{l,1} + x_2\eta_{l,2} + \frac{x_1^2 A + 2x_1 x_2 B + x_2^2 C}{x_1^2 + 2x_1 x_2 D + x_2^2 E} \tag{37}$$

Focke-Du Plessis VI[17]:

$$\eta_{l,m} = x_1\eta_{l,1} + x_2\eta_{l,2} + \frac{x_1^3 A + 3x_1^2 x_2 B + 3x_1 x_2^2 C + x_2^3 D}{x_1^2 + 2x_1 x_2 E + x_2^2 F} \tag{38}$$

Focke-Du Plessis VII[17]:

$$\eta_{l,m} = x_1\eta_{l,1} + x_2\eta_{l,2} + \frac{x_1 A + x_2 B}{x_1^3 + 3x_1^2 x_2 C + 3x_1 x_2^2 D + x_2^3 E} \tag{39}$$

Focke-Du Plessis VIII[17]:

$$\eta_{l,m} = x_1\eta_{l,1} + x_2\eta_{l,2} + \frac{x_1^2 A + 2x_1 x_2 B + x_2^2 C}{x_1^3 + 3x_1^2 x_2 D + 3x_1 x_2^2 E + x_2^3 F} \tag{40}$$

Focke-Du Plessis IX[17]:

$$\eta_{l,m} = x_1\eta_{l,1} + x_2\eta_{l,2} + \frac{x_1^3 A + 3x_1^2 x_2 B + 3x_1 x_2^2 C + x_2^3 D}{x_1^3 + 3x_1^2 x_2 E + 3x_1 x_2^2 F + x_2^3 G} \tag{41}$$

and Focke-Sandrock-Kok[18]:

$$\eta_{l,m} = 1 / [\sum_{i=1}^{m} x_i / (\sum_{j=1}^{m} x_j A_{ij}^{1/2})^{5/3}]^{6/5} \quad , \quad A_{ii} = \eta_{l,i} \tag{42}$$

where m is a number of mixture components, T_m is a temperature of a mixture, p_m is a pressure of a mixture, x_i is a mole fraction of the component i, ϕ_i is a volume

fraction of the component i, M_i is a molar mass of the component i, $\eta_{l,m}$ is a liquid viscosity of a mixture, $\eta_{l,i}$ is a liquid viscosity of the component i, $\rho_{l,m}$ is a liquid density of a mixture, $\rho_{l,i}$ is a liquid density of the component i, and A, B, C, D, E, F, G and H are parameters. A volume fraction of component i is defined as:

$$\varphi_i = x_i v_i / \sum_{j=1}^{m} v_j \quad , \quad i = 1, 2, \cdots, m \tag{43}$$

where v is a molar volume of pure mixture component, and m is a number of mixture components.

TABLE SI. Selected experimental data points for viscosities of the binary liquid mixtures (the reference numbers reffer to the Reference list in the paper *J. Serb. Chem. Soc.* 77 (8) (2012) 1083–1089)

No.	Mixture	Reference	n	T / K	p / bar
1	1,1,2,2-Tetrachloroethane+2-propanone	19	6	298.15	1
2	1,2-Ethandiol+water	20	77	293.15–353.15	1
3	1,2-Ethandiol+water	21	15	303.15	1
4	1-Butanol+1-decanol	22	16	308.15–313.15	1
5	1-Butanol+1-decanol	23	16	293.15–298.15	1
6	1-Butanol+1-nonanol	22	16	308.15–313.15	1
7	1-Butanol+1-nonanol	23	16	293.15–298.15	1
8	1-Butanol+1-pentanol	22	16	308.15–313.15	1
9	1-Butanol+1-pentanol	23	16	293.15–298.15	1
10	1-Chlorobutane+pentyl ethanoate	24	11	298.15	1
11	1-Chlorohexadecane+1,4-dimethylbenzene	25	7	298.15	1
12	1-Chlorohexadecane+benzene	25	7	298.15	1
13	1-Chlorohexadecane+cyclohexane	25	11	298.15	1
14	1-Chlorohexadecane+methylbenzene	25	7	298.15	1
15	1-Chlorohexadecane+methylcyclohexane	25	7	298.15	1
16	1-Chlorohexane+1,2-dimethylbenzene	25	7	298.15	1
17	1-Chlorohexane+benzene	25	7	298.15	1
18	1-Chlorohexane+cyclohexane	25	11	298.15	1
19	1-Chlorohexane+methylbenzene	25	7	298.15	1
20	1-Chlorohexane+methylcyclohexane	25	7	298.15	1
21	1-Decanol+1-undecanol	22	16	308.15–313.15	1
22	1-Decanol+1-undecanol	23	16	293.15–298.15	1
23	1-Heptanol+1-nonanol	26	22	293.15–298.15	1
24	1-Heptanol+1-octanol	22	16	308.15–313.15	1
25	1-Heptanol+1-octanol	23	16	293.15–298.15	1
26	1-Heptanol+1-undecanol	26	22	293.15–298.15	1
27	1-Hexanol+benzene	27	14	298.15	1
28	1-Methylnaphthalene+methylcyclohexane	28	162	303.15–343.15	1–1000
29	1-Nonanol+1-decanol	23	16	293.15–298.15	1
30	1-Nonanol+1-undecanol	26	22	293.15–298.15	1

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TABLE SI. Continued

No.	Mixture	Reference	n	T / K	p / bar
31	1-Pentanol+1-heptanol	26	22	293.15–298.15	1
32	1-Pentanol+1-nonanol	26	22	293.15–298.15	1
33	1-Pentanol+1-octanol	22	16	308.15–313.15	1
34	1-Pentanol+1-octanol	23	16	293.15–298.15	1
35	1-Pentanol+1-undecanol	26	22	293.15–298.15	1
36	1-Propanol+1-butanol	22	16	308.15–313.15	1
37	1-Propanol+1-butanol	23	16	293.15–298.15	1
38	1-Propanol+1-heptanol	26	22	293.15–298.15	1
39	1-Propanol+1-nonanol	26	22	293.15–298.15	1
40	1-Propanol+1-pentanol	22	16	308.15–313.15	1
41	1-Propanol+1-pentanol	23	16	293.15–298.15	1
42	1-Propanol+1-pentanol	26	22	293.15–298.15	1
43	1-Propanol+1-undecanol	26	22	293.15–298.15	1
44	1-Propanol+benzene	29	14	295.15	1
45	1-Propanol+water	21	12	303.15	1
46	2,6,10,15,19,23-Hexamethyl-tetracosane+butane	30	24	273.15–333.15	1
47	2,6,10,15,19,23-Hexamethyl-tetracosane+hexane	30	23	273.15–333.15	1
48	2-Bromobutane+hexane	10	11	298.15	1
49	2-Butanone+1-chlorohexadecane	25	11	298.15	1
50	2-Butanone+1-chlorohexane	25	11	298.15	1
51	2-Butanone+benzene	25	7	298.15	1
52	2-Butanone+ethyl ethanoate	25	11	298.15	1
53	2-Butanone+methylbenzene	25	7	298.15	1
54	2-Butanone+methylcyclohexane	25	11	298.15	1
55	2-Butanone+propyl propanoate	25	11	298.15	1
56	2-Methyl-2-propanol+benzene	29	15	298.15	1
57	2-Propanone+1,2-dimethylbenzene	25	7	298.15	1
58	2-Propanone+1,2-dimethylcyclohexane,cis	25	11	298.15	1
59	2-Propanone+1,4-dimethylbenzene	25	7	298.15	1
60	2-Propanone+1-chlorohexane	25	11	298.15	1
61	2-Propanone+2-propanol	31	10	298.15	1
62	2-Propanone+benzene	25	7	298.15	1
63	2-Propanone+cyclohexane	31	10	298.15	1
64	2-Propanone+cyclohexane	25	11	298.15	1
65	2-Propanone+ethanol	31	10	298.15	1
66	2-Propanone+ethyl ethanoate	25	10	298.15	1
67	2-Propanone+hexane	31	10	298.15	1
68	2-Propanone+methanol	31	10	298.15	1
69	2-Propanone+methylbenzene	25	7	298.15	1
70	2-Propanone+propyl propanoate	25	11	298.15	1
71	2-Propanone+tetrachloromethane	31	10	298.15	1
72	2-Propanone+water	19	6	298.15	1

TABLE SI. Continued

No.	Mixture	Reference	n	T / K	p / bar
73	3-Methyl-1-butanol+benzene	29	21	293.15	1
74	3-Pentanol+benzene	29	25	293.15	1
75	4-Methylcyclohexanone+hexadecane	10	11	298.15	1
76	4-Methylcyclohexanone+hexane	10	12	298.15	1
77	4-Methylcyclohexanone+tetradecane	10	11	298.15	1
78	Benzene+1,2-dichloroethane	19	6	298.15	1
79	Benzene+benzyl benzoate	32	7	298.15	1
80	Benzene+cyclohexane	33	5	298.15	1
81	Benzene+cyclohexane	19	6	298.15	1
82	Benzene+ethanol	34	11	298.15	1
83	Benzene+ethyl benzoate	32	8	298.15	1
84	Benzene+hexane	10	12	298.15	1
85	Benzene+hexane	35	10	298.15	1
86	Benzene+methylbenzene	35	10	298.15	1
87	Benzene+tetrachloromethane	19	6	298.15	1
88	Benzene+trichloromethane	19	6	298.15	1
89	Benzyl ethanoate+1,4-dioxane	6	9	313.15	1
90	Benzyl Ethanoate+m-Methylphenol	6	7	313.15	1
91	Benzyl ethanoate+phenylamine	6	9	303.15	1
92	Butylamine+1-butanol	36	22	303.15–313.15	1
93	Butylamine+1-decanol	36	22	303.15–313.15	1
94	Butylamine+1-heptanol	36	22	303.15–313.15	1
95	Butylamine+1-hexanol	36	22	303.15–313.15	1
96	Butylamine+1-octanol	36	22	303.15–313.15	1
97	Butylamine+1-pentanol	36	22	303.15–313.15	1
98	Butylamine+1-propanol	36	22	303.15–313.15	1
99	Butylamine+ethanol	36	22	303.15–313.15	1
100	Chlorobenzene+tetrachloromethane	19	6	298.15	1
101	Cyclohexane+2-propanol	31	10	298.15	1
102	Decane+docosane	37	21	323.15–343.15	1
103	Decane+eicosane	37	28	313.15–343.15	1
104	Decane+pentadecane	38	22	293.15–298.15	1
105	Decane+pentadecane	39	22	308.15–313.15	1
106	Decane+tetracosane	37	14	333.15–343.15	1
107	Decane+tridecane	38	22	293.15–298.15	1
108	Decane+tridecane	39	22	308.15–313.15	1
109	Diethyl carbonate+1,4-dimethylbenzene	40	13	298.15	1
110	Diethyl carbonate+dodecane	40	12	298.15	1
111	Diethyl carbonate+octane	40	16	298.15	1
112	Dimethyl carbonate+1,4-dimethylbenzene	40	12	298.15	1
113	Dimethyl carbonate+dodecane	40	12	298.15	1
114	Dimethyl carbonate+octane	40	17	298.15	1
115	Dimethyl sulfoxide+acetic acid	19	6	298.15	1
116	Dimethyl sulfoxide+methanol	31	10	298.15	1

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TABLE SI. Continued

No.	Mixture	Reference	n	T / K	p / bar
117	Dimethyl sulfoxide+methanol	19	6	298.15	1
118	Dimethyl sulfoxide+methyl cyanide	19	6	298.15	1
119	Dimethyl sulfoxide+trichloromethane	31	10	298.15	1
120	Dimethyl sulfoxide+water	19	6	298.15	1
121	Ethanol+1-propanol	21	12	303.15	1
122	Ethanol+2-propanol	31	10	298.15	1
123	Ethanol+cyclohexane	31	10	298.15	1
124	Ethanol+heptane	34	12	298.15	1
125	Ethanol+water	21	80	283.15–323.15	1
126	Ethyl ethanoate+1,2-dimethylbenzene	25	7	298.15	1
127	Ethyl ethanoate+1-chlorohexadecane	25	11	298.15	1
128	Ethyl ethanoate+1-chlorohexane	25	11	298.15	1
129	Ethyl ethanoate+benzene	25	7	298.15	1
130	Ethyl ethanoate+cyclohexane	25	11	298.15	1
131	Ethyl ethanoate+methylbenzene	25	7	298.15	1
132	Ethylbenzene+hexadecane	41	24	293.15–298.15	1
133	Ethylbenzene+octane	41	23	293.15–298.15	1
134	Ethylbenzene+tetradecane	41	24	293.15–298.15	1
135	Heptane+1-methylnaphthalene	28	162	303.15–343.15	1–1000
136	Heptane+benzene	34	13	298.15	1
137	Heptane+decane	42	11	293.15	1
138	Heptane+dodecane	42	11	293.15	1
139	Heptane+methylcyclohexane	28	162	303.15–343.15	1–1000
140	Heptane+octane	42	11	293.15	1
141	Heptane+tetradecane	42	11	293.15	1
142	Hexadecane+2-bromobutane	10	12	298.15	1
143	Hexadecane+benzene	10	11	298.15	1
144	Hexadecane+hexane	10	22	298.15	1
145	Hexadecane+tetrachloromethane	10	12	298.15	1
146	Hexadecane+tetradecane	10	13	298.15	1
147	Hexane+benzene	43	21	298.15–323.15	1
148	Hexane+benzene	44	14	298.15	1
149	Hexane+cyclohexane	31	10	298.15	1
150	Hexane+decane	42	11	293.15	1
151	Hexane+ethanol	31	10	298.15	1
152	Hexane+ethylbenzene	43	24	298.15–323.15	1
153	Hexane+heptane	42	11	293.15	1
154	Hexane+methylbenzene	43	27	298.15–323.15	1
155	Hexane+octane	42	11	293.15	1
156	Hexane+trichloromethane	31	10	298.15	1
157	Methanol+1-propanol	21	14	303.15	1
158	Methanol+2-propanol	31	10	298.15	1
159	Methanol+ethanol	31	10	298.15	1
160	Methanol+ethanol	21	106	283.15–323.15	1

TABLE SI. Continued

No.	Mixture	Reference	n	T / K	p / bar
161	Methanol+water	21	70	283.15–323.15	1
162	Methyl cyanide+1-chlorobutane	24	16	298.15	1
163	Methyl cyanide+pentyl ethanoate	24	12	298.15	1
164	Methyl cyanide+tetrachloromethane	24	11	298.15	1
165	Methyl ethanoate+hexane	31	10	298.15	1
166	Methyl ethanoate+trichloromethane	31	10	298.15	1
167	Methylbenzene+benzyl benzoate	32	7	298.15	1
168	Methylbenzene+decane	41	24	293.15–298.15	1
169	Methylbenzene+dodecane	41	24	293.15–298.15	1
170	Methylbenzene+ethyl benzoate	32	7	298.15	1
171	Methylbenzene+hexadecane	41	24	293.15–298.15	1
172	Methylbenzene+octane	41	24	293.15–298.15	1
173	Methylbenzene+tetradecane	41	24	293.15–298.15	1
174	o-Chlorophenol+1,4-dioxane	19	6	298.15	1
175	Octane+decane	42	11	293.15	1
176	Octane+pentadecane	38	22	293.15–298.15	1
177	Octane+pentadecane	39	22	308.15–313.15	1
178	Octane+tetradecane	42	11	293.15	1
179	Octane+tridecane	38	22	293.15–298.15	1
180	Octane+tridecane	39	22	308.15–313.15	1
181	Octane+undecane	38	22	293.15–298.15	1
182	Octane+undecane	39	22	308.15–313.15	1
183	Propyl propanoate+1,4-dimethylbenzene	25	7	298.15	1
184	Propyl propanoate+1-chlorohexadecane	25	11	298.15	1
185	Propyl propanoate+1-chlorohexane	25	11	298.15	1
186	Propyl propanoate+1-hexanol	27	16	298.15	1
187	Propyl propanoate+benzene	44	12	298.15	1
188	Propyl propanoate+benzene	25	7	298.15	1
189	Propyl propanoate+hexane	44	14	298.15	1
190	Propyl propanoate+methylbenzene	25	7	298.15	1
191	Propyl propanoate+methylcyclohexane	25	11	298.15	1
192	Tetrachloromethane+2-propanol	31	10	298.15	1
193	Tetrachloromethane+benzene	10	11	298.15	1
194	Tetrachloromethane+benzene	33	5	298.15	1
195	Tetrachloromethane+cyclohexane	31	9	298.15	1
196	Tetrachloromethane+cyclohexane	33	5	298.15	1
197	Tetrachloromethane+hexane	10	10	298.15	1
198	Tetradecane+2-bromobutane	10	11	298.15	1
199	Tetradecane+hexadecane	42	11	293.15	1
200	Tetradecane+hexane	10	12	298.15	1
201	Trichloroethene+1,4-dimethylbenzene	45	9	303.15	1
202	Trichloroethene+benzene	45	10	303.15	1
203	Trichloroethene+methylbenzene	45	10	303.15	1
204	Trichloroethene+tetrachloromethane	45	7	303.15	1

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TABLE SI. Continued

No.	Mixture	Reference	n	T / K	p / bar
205	Trichloroethene+trichloromethane	45	11	303.15	1
206	Trichloromethane+1,4-dioxane	19	6	298.15	1
207	Trichloromethane+2-propanone	19	6	298.15	1
208	Trichloromethane+benzene	35	10	298.15	1
209	Trichloromethane+methanol	31	10	298.15	1
210	Trichloromethane+methylbenzene	35	10	298.15	1
211	Tridecane+pentadecane	38	22	293.15–298.15	1
212	Tridecane+pentadecane	39	22	308.15–313.15	1
213	Triethylamine+chlorobenzene	40	10	298.15	1
214	Triethylamine+methanol	31	10	298.15	1
215	Triethylamine+trichloromethane	31	10	298.15	1
216	Undecane+pentadecane	38	22	293.15–298.15	1
217	Undecane+pentadecane	39	22	308.15–313.15	1
218	Undecane+tridecane	38	22	293.15–298.15	1
219	Undecane+tridecane	39	22	308.15–313.15	1

TABLE SII. Selected experimental data points for viscosities of the ternary liquid mixtures (the reference numbers reffer to the Reference list in the paper *J. Serb. Chem. Soc.* 77 (8) (2012) 1083–1089)

No.	Mixture	Reference	n	T / K	p / bar
1	2-Propanol+2-butanol+ethanol	46	48	293.15–308.15	1
2	2-Propanone+ethanol+2-propanol	47	39	298.15	1
3	2-Propanone+ethanol+methanol	47	39	298.15	1
4	2-Propanone+hexane+cyclohexane	47	39	298.15	1
5	2-Propanone+hexane+ethanol	47	39	298.15	1
6	2-Propanone+tetrachloromethane+cyclohexane	47	38	298.15	1
7	Decane+eicosane+tetracosane	37	37	333.15–343.15	1
8	Dimethyl sulfoxide+2-propa-none+trichloromethane	47	23	298.15	1
9	Dimethyl sulfoxide+tetra-chloromethane+methanol	47	22	298.15	1
10	Dimethyl sulfoxide+tetra-chloromethane+trichloromethane	47	23	298.15	1
11	Dimethyl sulfoxide+tri-chloromethane+methanol	47	39	298.15	1
12	Ethanol+1-propanol+water	21	62	303.15	1
13	Ethanol+2-propanol+cyclohexane	46	38	298.15	1
14	Ethanol+benzene+heptane	34	27	298.15	1
15	Ethanol+cyclohexane+2-propanol	47	39	298.15	1
16	Ethylbenzene+tetradecane+hexadecane	48	58	293.15–298.15	1
17	Hexane+cyclohexane+ethanol	47	39	298.15	1
18	Methane+methylcyclo-hexane+methylnaphthalene	15	810	303.15–343.15	1–1000
19	Methanol+1-propanol+water	21	61	303.15	1

TABLE SII. Continued

No.	Mixture	Reference	n	T / K	p / bar
20	Methanol+ethanol+1-propanol	21	68	303.15	1
21	Methanol+ethanol+2-propanol	47	38	298.15	1
22	Methanol+ethanol+water	21	357	283.15–323.15	1
23	Methyl ethanoate+cyclohexane+ethanol	47	23	298.15	1
24	Methyl ethanoate+trichloromethane+methanol	47	31	298.15	1
25	Methylbenzene+ethylbenzene+hexadecane	48	58	293.15–298.15	1
26	Methylbenzene+ethylbenzene+tetradecane	48	58	293.15–298.15	1
27	Methylbenzene+octane+ethylbenzene	48	58	293.15–298.15	1
28	Methylbenzene+octane+hexadecane	48	58	293.15–298.15	1
29	Methylbenzene+octane+tetradecane	48	58	293.15–298.15	1
30	Methylbenzene+tetradecane+hexadecane	48	58	293.15–298.15	1
31	Octane+ethylbenzene+hexadecane	48	57	293.15–298.15	1
32	Octane+ethylbenzene+tetradecane	48	57	293.15–298.15	1
33	Octane+tetradecane+hexadecane	48	18	293.15–298.15	1
34	Propyl propanoate+1-hexanol+benzene	27	80	298.15	1.
35	Propyl propanoate+hexane+benzene	44	72	298.15	1.
36	Tetrachloromethane+cyclohexane+2-propanol	47	38	298.15	1
37	Trichloromethane+2-propanol+2-butanol	49	56	293.15–308.15	1
38	Trichloromethane+ethanol+methanol	47	31	298.15	1
39	Triethylamine+ethanol+1-propanol	47	15	298.15	1
40	Triethylamine+methanol+ethanol	47	31	298.15	1
41	Triethylamine+methanol+trichloromethane	47	39	298.15	1