

Table index

Appendix: II: Data Processing Tables for Distribution & Selectivity Diagrams

Table No	Contents	Page
Table. -D-1	Data for Construction of Distribution Diagrams for System: B-H-Dmf+W at Different Temperatures with Anti Solvent Concentrations as a Parameter	91
Table. - D-2	Data for Construction of Distribution Diagrams for System: T-H-Dmf+W at Different Temperatures with Anti Solvent Concentrations as a Parameter	92
Table. - D-3	Data for Construction of Distribution Diagrams for System: X-H-Dmf+W at Different Temperatures with Anti Solvent Concentrations as a Parameter	93
Table. - D-4	Data for Construction of Distribution Diagrams for System: B-Hep-Dmf+W at Different Temperatures with Anti Solvent Concentrations as a Parameter	94
Table - D-5	Data for Construction of Distribution Diagrams for System: B-Oct-Dmf+W at Different Temperatures with Anti Solvent Concentrations as a Parameter	95
Table - D-6	Data for Construction of Distribution Diagrams for System: B-H-Dmso+W at Different Temperatures with Anti Solvent Concentrations as a Parameter	96
Table. - D-7	Data for Construction of Distribution Diagrams for System: T-H-Dmso+W at Different Temperatures with Anti Solvent Concentrations as a Parameter	97
Table. - D-8	Data for Construction of Distribution Diagrams for System: X-H-Dmso+W at Different Temperatures with Anti Solvent Concentrations as a Parameter	98
Table. - D-9	Data for Construction of Distribution Diagrams for System: B-Hep-Dmso+W at Different Temperatures with Anti Solvent Concentrations as a Parameter	99

Table - D-10	Data for Construction of Distribution Diagrams for System: B-Oct-Dmso+W at Different Temperatures with Anti Solvent Concentrations as a Parameter	100
Table. - D-11	Data for Construction of Distribution Diagrams for System: B-H-Dmf-W at Different Anti Solvent Concentrations with Temperatures as a Parameter	101
Table. - D-12	Data for Construction of Distribution Diagrams for System: T-H-Dmf-W at Different Anti Solvent Concentrations with Temperature as a Parameter.	102
Table. - D-13	Data for Construction of Distribution Diagrams for System: X-H-Dmf-W at Different Anti Solvent Concentrations with Temperature as a Parameter.	103
Table. - D-14	Data for Construction of Distribution Diagrams for System:: B-Hep-Dmf-W at Different Anti Solvent Concentrations with Temperature as a Temperatures with Parameter.	104
Table. - D-15	Data for Construction of Distribution Diagrams for System: B-Oct-Dmf-W at Different Anti Solvent Concentrations with Temperature as a Parameter	105
Table. - D-16	Data for Construction of Distribution Diagrams for System: B-H-Dmso-W at Different Anti Solvent Concentrations with Temperature as a Parameter.	106
Table. - D-17	Data for Construction of Distribution Diagrams for System: T-H-Dmso-W at Different Anti Solvent Concentrations with Temperature as a Parameter	107
Table. - D-18	Data for Construction of Distribution Diagrams for System: X-H-Dmso-W at Different Anti Solvent Concentrations with Temperature as a Parameter	108
Table. - D-19	Data for Construction of Distribution Diagrams for System: B-Hep-Dmso-W at Different Anti Solvent Concentrations with Temperatures as a Parameter.	109
Table. - D-20	Data for Construction of Distribution Diagrams for System: B-Oct-Dmso-W-W at Different Anti Solvent Concentrations with Temperatures as a Parameter.	110

Table. - D-21 Data for Construction of Distribution Diagrams for System::	111
B-T-X-100%Dmf+0%W at Different Temperatures with Aromatic Effect as a Parameter	
Table. - D 22 Data for Construction of Distribution Diagrams for System:	112
B-T-X-90%Dmf+10%W at Different Temperatures with Aromatic Effect as a Parameter.	
Table. - D-23 Data for Construction of Distribution Diagrams for System:	113
B-T-X-80%Dmf+20%W at Different Temperatures with Aromatic Effect as a Parameter	
Table. - D -24 Data for Construction of Distribution Diagrams for System:	114
B-T-X-100%Dmso+0%Wat Different Temperatures with Aromatic Effect as a Parameter.	
Table. - D -25 Data for Construction of Distribution Diagrams for System:	115
:	B-T-X-90%Dmso+10%Wat Different Temperatures with Aromatic Effect as a Parameter.
Table. - D -26 Data for Construction of Distribution Diagrams for System:	116
:	B-T-X-80%Dmso+20%Wat Different Temperatures with Aromatic Effect as a Parameter.
Table. - D-27 Data for Construction of Distribution Diagrams for System:	117
B-H-Hep-Oct-100%Dmf+0%Wat Different Temperatures with Aliphatic Effect as a Parameter.	
Table. - D-28 Data for Construction of Distribution Diagrams for System	118
B-H-Hep-Oct-90%Dmf+10%Wat Different Temperatures with Aliphatic Effect as a Parameter.	
Table. - D-29 Data for Construction of Distribution Diagrams for System:	119
B-H-Hep-Oct-80%Dmf+20%Wat Different Temperatures with Aliphatic Effect as a Parameter.	
Table. - D-30 Data for Construction of Distribution Diagrams for System:	120
B-H-Hep-Oct-100%Dmso+0%Wat Different Temperatures with Aliphatic Effect as a Parameter.	
Table. - D-31 Data for Construction of Distribution Diagrams for System	121
B-H-Hep-Oct-90%Dmso+10%Wat Different Temperatures with Aliphatic Effect as a Parameter.	

Table. - D-32	Data for Construction of Distribution Diagrams for System: B-H-Hep-Oct-80%Dmso+20%Wat Different Temperatures with Aliphatic Effect as a Parameter.	122
.Table. –S-1	Data for Construction of Selectivity Diagrams for System: B-H-Dmf-Wat Different Temperature with Anti Solvent Concentrations as a Parameter.	123
Table. –S-2	Data for Construction of Selectivity Diagrams for System:: T-H-Dmf+Wat Different Temperatures with Anti Solvent Concentrations as a Parameter.	124
Table. –S-3	Data for Construction of Selectivity Diagrams for System: X-H-Dmf-Wat Different Temperature with Anti Solvent Concentrations as a Parameter.	125
Table. - S –4	Data for Construction of Selectivity Diagrams for System: B-Hep-Dmf-Wat Different Temperature with Anti Solvent Concentrations as a Parameter.	126
Table - S –5	Data for Construction of Selectivity Diagrams for System: B-Oct-Dmf+Wat Different Temperatures with Anti Solvent Concentrations as a Parameter.	127
Table – S-6	Data for Construction of Selectivity Diagrams for System: B-H-Dmso-Wat Different Temperature with Anti Solvent Concentrations as a Parameter.	128
Table. - S –7	Data for Construction of Selectivity Diagrams for System: T-H-Dmso-Wat Different Temperature with Anti Solvent Concentrations as a Parameter.	129
Table. - S-8	Data for Construction of Selectivity Diagrams for System: X-H-Dmso+Wat Different Temperatures with Anti Solvent Concentrations as a Parameter.	130
Table. - S –9	Data for Construction of Selectivity Diagrams for System: B-Hep-Dmso-Wat Different Temperature with Anti Solvent Concentrations as a Parameter.	131
.Table. - S –10	Data for Construction of Selectivity Diagrams for System: B-Oct-Dmso-Wat Different Temperature with Anti Solvent Concentrations as a Parameter.	132

.Table. - S-11	Data for Construction of Selectivity Diagrams for System: B-H-Dmf+Wat Different Anti Solvent Concentrations Concentrations with Temperatures as a Parameter.	133
Table. - S –12	Data for Construction of Selectivity Diagrams for System: T-H-Dmf+Wat Different Anti Solvent Concentrations Concentrations with Temperatures as a Parameter	134
Table. - S –13	Data for Construction of Selectivity Diagrams for System: X-H-Dmf+Wat Different Anti Solvent Concentrations Concentrations with Temperatures as a Parameter.	135
Table. - S –14	Data for Construction of Selectivity Diagrams for System:: B-Hep-Dmf+Wat Different Anti Solvent Concentrations with Temperatures as a Parameter.	136
Table. - S -15	Data for Construction of Selectivity Diagrams for System:: B-Oct-Dmf+Wat Different Anti Solvent Concentrations with Temperatures as a Parameter.	137
Table. - S –16	Data for Construction of Selectivity Diagrams for System:: B-H-Dmso+Wat Different Anti Solvent Concentrations with Temperatures as a Parameter.	138
Table. – S- 17	Data for Construction of Selectivity Diagrams for System: T-H-Dmso+Wat Different Anti Solvent Concentrations with Temperatures as a Parameter.	139
Table. – S- 18	Data for Construction of Selectivity Diagrams for System: X-H-Dmso+Wat Different Anti Solvent Concentrations with Temperatures as a Parameter.	140
Table. –S-19	Data for Construction of Selectivity Diagrams for System: B-Hep-Dmso+ W at Different Anti Solvent Concentrations with Temperatures as a Parameter.	141
Table. – S-20	Data for Construction of Selectivity Diagrams for System: B-Oct-Dmso+ W at Different Anti Solvent Concentrations with Temperatures as a Parameter.	142
.Table. - S –21	Data for Construction of Selectivity Diagrams for System: B-T-X-100%Dmf+0% W at Different Temperatures with Aromatic Effect as a Parameter.	143

Table. - S -22 Data for Construction of Selectivity Diagrams for System::	144
B-T-X-90%Dmf+10% W at Different Temperatures with Aromatic Effect as a Parameter.	
Table. - S-23 Data for Construction of Selectivity Diagrams for System:	145
B-T-X-80%Dmf+20% W at Different Temperatures with Aromatic Effect as a Parameter.	
Table. - S -24 Data for Construction of Selectivity Diagrams for System:	146
:	B-T-X-100%Dmso+0%W at Different Temperatures with Aromatic Effect as a Parameter.
Table. - S -25 Data for Construction of Selectivity Diagrams for System:	147
B-T-X-90%Dmso+10%W at Different Temperatures with Aromatic Effect as a Parameter.	
Table. - S -26 Data for Construction of Selectivity Diagrams for System	148
B-T-X-80%Dmso+20%W at Different Temperatures with Aromatic Effect as a Parameter.	
Table. - S –27 Data for Construction of Selectivity Diagrams for System	149
B-H-Hep-100%Oct-Dmf+0%W at Different Temperatures with Aliphatic Effect as a Parameter.	
Table. - S –28 Data for Construction of Selectivity Diagrams for System	150
B-H-Hep-Oct-90%Dmf+10%W at Different Temperatures with Aliphatic Effect as a Parameter.	
Table. - S-29 Data for Construction of Selectivity Diagrams for System	151
B-H-Hep-Oct-80%Dmf+20%W at Different Temperatures with Aliphatic Effect as a Parameter.	
Table. - S –30 Data for Construction of Selectivity Diagrams for System	152
B-H-Hep-Oct-100%Dmso+0%W at Different Temperatures with Aliphatic Effect as a Parameter.	
Table. - S –31 Data for Construction of Selectivity Diagrams for System	153
B-H-Hep-Oct-90%Dmso+10%W at Different Temperatures with Aliphatic Effect as a Parameter.	
Table. - S –32 Data for Construction of Selectivity Diagrams for System	154
B-H-Hep-Oct-80%Dmso+20%W at Different Temperatures with Aliphatic Effect as a Parameter.	

Table index

Appendix III:Data: Processing Tables in terms of Weight Percent & Mole Fraction

Figure No	Contents	Page
Table-W - 1.1	Tie-Line data in terms of Weight Percent & Mole Fraction System Benzene-Hexane-Dmf-W at 20 °C	155
Table-W - 1.2	Tie-Line data in terms of Weight Percent & Mole Fraction System Benzene-Hexane-Dmf-W at 30 °C	156
Table-W - 1.3	Tie-Line data in terms of Weight Percent & Mole Fraction System toluene-Hexane-Dmf-W at 20°C	157
Table-W - 1.4	Tie-Line data in terms of Weight Percent & Mole Fraction System toluene-Hexane-Dmf-W at 30 °C	158
Table-W - 1.5	Tie-Line data in terms of Weight Percent & Mole Fraction System toluene-Hexane-Dmf-W at 40°C	159
Table-W - 1.6	Tie-Line data in terms of Weight Percent & Mole Fraction System Xylene-Hexane-Dmf-W at 20°C	160
Table-W - 1.7	Tie-Line data in terms of Weight Percent & Mole Fraction System Xylene-Hexane-Dmf-W at 30°C	161
Table-W - 1.8	Tie-Line data in terms of Weight Percent & Mole Fraction System Xylene-Hexane-Dmf-W at 40°C	162
Table-W - 1.9	Tie-Line data in terms of Weight Percent & Mole Fraction System Benzene-Heptane-Dmf-W at 20°C	163
Table-W - 1.10	Tie-Line data in terms of Weight Percent & Mole Fraction System Benzene-Hept(H')-Dmf(D) -W at 30°C	164
Table-W - 1.11	Tie-Line data in terms of Weight Percent & Mole Fraction System Benzene-Heptane-Dmf-W at 40°C	165
Table-W - 1.12	Tie-Line data in terms of Weight Percent & Mole Fraction System Benzene-Oct-Dmf-W at 20°C	166
Table-W - 1.13	Tie-Line data in terms of Weight Percent & Mole Fraction System Benzene-Oct-Dmf-W at 30°C	167
Table-W - 1.14	Tie-Line data in terms of Weight Percent & Mole Fraction System Benzene-Oct-Dmf-W at 40°C	168

Table-W - 2.1 Tie-Line data in terms of Weight Percent & Mole Fraction System Benzene-Hexane-Dmso-W at 20°C	169
Table-W - 2.2 Tie-Line data in terms of Weight Percent & Mole Fraction System Benzene-Hexane-Dmso-W at 30°C	170
Table-W - 2.3 Tie-Line data in terms of Weight Percent & Mole Fraction System Benzene-Hexane-Dmso-W at 40°C	171
Table-W - 2.4 Tie-Line Data in terms of Weight Percent & Mole Fraction System toluene-Hexane-Dmso-W at 20°C	172
Table-W - 2.5 Tie-Line Data in terms of Weight Percent & Mole Fraction System toluene-Hexane-Dmso-W at 30°C	173
Table-W - 2.6 Tie-Line Data in terms of Weight Percent & Mole Fraction System toluene-Hexane-Dmso-W at 40°C	174
Table-W - 2.7 Tie-Line Data in terms of Weight Percent & Mole Fraction System Xylene-Hexane-Dmso-W at 20°C	175
Table-W - 2.8 Tie-Line Data in terms of Weight Percent & Mole Fraction System Xylene-Hexane-Dmso-W at 30°C	176
Table-W - 2.9 Tie-Line Data in terms of Weight Percent & Mole Fraction System Xylene-Hexane-Dmso-W at 40°C	177
Table-W - 2.10 Tie-Line Data in terms of Weight Percent & Mole Fraction System Benzene- Hep-Dmso -W at 20°C	178
Table-W - 2.11 Tie-Line Data in terms of Weight Percent & Mole Fraction System Benzene- Hep-Dmso -W at 30 °C	179
Table-W - 2.12 Tie-Line Data in terms of Weight Percent & Mole Fraction System Benzene-Hept-Dmso-W at 40°C	180
Table-W - 2.13 Tie-Line Data in terms of Weight Percent & Mole Fraction System Benzene- Oct-Dmso -W at 20 °C	181
Table-W - 2.14 Tie-Line Data in terms of Weight Percent & Mole Fraction System Benzene- Oct-Dmso -W at 30 °C	182
Table-W - 2.15 Tie-Line Data in terms of Weight Percent & Mole Fraction System Benzene-Oct-Dmso -W at 40 °C	183

Table index

Appendix: IV:Data Processing Tables for Computer programming: Details of NRTL method

Table No	Contents	Page
Table-1.1	Prediction of quaternary L-L equilibrium data by NRTL method Processing Data Tables for System B - H - Dmf - W at 20 °C	184
Table-1.2	Prediction of quaternary L-L equilibrium data by NRTL method Processing Data Tables for System B - H - Dmf - W at 30 °C	190
Table-1.3	Prediction of quaternary L-L equilibrium data by NRTL method Processing Data Tables for System T - H - Dmf - W at 20 °C	196
Table-1.4	Prediction of quaternary L-L equilibrium data by NRTL method Processing Data Tables for System T - H - Dmf - W at 30 °C	200
Table-1.5	Prediction of quaternary L-L equilibrium data by NRTL method Processing Data Tables for System T - H - Dmf - W at 40 °C	206
Table-1.6	Prediction of quaternary L-L equilibrium data by NRTL method Processing Data Tables for System X - H - Dmf - W at 20 °C	212
Table-1.7	Prediction of quaternary L-L equilibrium data by NRTL method Processing Data Tables for System X - H - Dmf - W at 40 °C	216
Table-1.8	Prediction of quaternary L-L equilibrium data by NRTL method Processing Data Tables for System B - Hep - Dmf - W at 20 °C	220
Table-1.9	Prediction of quaternary L-L equilibrium data by NRTL method Processing Data Tables for System B - Hep - Dmf - W at 30 °C	223
Table-1.10	Prediction of quaternary L-L equilibrium data by NRTL method Processing Data Tables for System B - Hep - Dmf - W at 40 °C	229
Table-1.11	Prediction of quaternary L-L equilibrium data by NRTL method Processing Data Tables for System B - Oct - Dmf - W at 20 °C	235
Table-1.12	Prediction of quaternary L-L equilibrium data by NRTL method Processing Data Tables for System B - Oct - Dmf - W at 30 °C	241
Table-1.13	Prediction of quaternary L-L equilibrium data by NRTL method Processing Data Tables for System B - Oct - Dmf - W at 40 °C	247
Table-2.1	Prediction of quaternary L-L equilibrium data by NRTL method Processing Data Tables for System B - H - Dmso - W at 20 °C	253

Table-2.2	Prediction of quaternary L-L equilibrium data by NRTL method	257
	Processing Data Tables for System B - H - Dmso - W at 30 °C	
Table-2.3	Prediction of quaternary L-L equilibrium data by NRTL method	263
	Processing Data Tables for System B - H - Dmso - W at 40 °C	
Table-2.4	Prediction of quaternary L-L equilibrium data by NRTL method	267
	Processing Data Tables for System T - H - Dmso - W at 20 °C	
Table-2.5	Prediction of quaternary L-L equilibrium data by NRTL method	273
	Processing Data Tables for System T - H - Dmso - W at 30 °C	
Table-2.6	Prediction of quaternary L-L equilibrium data by NRTL method	279
	Processing Data Tables for System T - H - Dmso - W at 40 °C	
Table-2.7	Prediction of quaternary L-L equilibrium data by NRTL method	285
	Processing Data Tables for System X - H - Dmso - W at 20 °C	
Table-2.8	Prediction of quaternary L-L equilibrium data by NRTL method	291
	Processing Data Tables for System X - H - Dmso - W at 30 °C	
Table-2.9	Prediction of quaternary L-L equilibrium data by NRTL method	297
	Processing Data Tables for System X - H - Dmso - W at 40 °C	
Table-2.10	Prediction of quaternary L-L equilibrium data by NRTL method	303
	Processing Data Tables for System B - Hep - Dmso - W at 20 °C	
Table-2.11	Prediction of quaternary L-L equilibrium data by NRTL method	309
	Processing Data Tables for System B - Hep - Dmso - W at 30 °C	
Table-2.12	Prediction of quaternary L-L equilibrium data by NRTL method	315
	Processing Data Tables for System B - Hep - Dmso - W at 40 °C	
Table-2.13	Prediction of quaternary L-L equilibrium data by NRTL method	321
	Processing Data Tables for System B - Oct - Dmso - W at 20 °C	
Table-2.14	Prediction of quaternary L-L equilibrium data by NRTL method	327
	Processing Data Tables for System B - Oct - Dmso - W at 30 °C	
Table-2.15	Prediction of quaternary L-L equilibrium data by NRTL method	333
	Processing Data Tables for System B - Oct - Dmso - W at 40 °C	