

APPENDIX D

Table stream of rectifying zone

Appendix Table D1 The stream table of zero rectifying

	1A	2A	3A	4A	5A	6A	RECYCLE MEOH	MEOH	NAOH	OIL
Temperature C	53.18814	53.18957	60	25.00764	60	105.6674	86.400546	25	25	25
Pressure kPa	100	101.325	101.325	101.325	101.325	101.325	101.325	100	100	100
Vapor Frac	0	0	0	0	0	0	0	0	0	0
Mole Flow kmol/hr	7.46512	7.46512	7.46512	1.132865	1.132865	5.489966	3.10801938	6	0.300022	1.132865
Mass Flow kg/hr	241.5758	241.5758	241.5758	1000	1000	1004.14	99.8129467	130	12	1000
Volume Flow cum/hr	0.294989	0.294989	0.297408	5.585033	5.619089	1.379722	0.14169351	0.242462	0.006341	5.585025
Mass Flow kg/hr										
TRIOLEIC	0	0	0	550	550	0.676019	0	0	0	550
METHANOL	229.5758	229.5758	229.5758	0	0	0	99.5782265	130	0	0
NAOH	12	12	12	0	0	12	0	0	12	0
METHYL-OLEIC	0	0	0	0	0	505.0198	0	0	0	0
GLYCEROL	0	0	0	0	0	80.0454	0	0	0	0
WATER	0	0	0	0	0	0	0	0	0	0
DI-OLEIC	0	0	0	0	0	0.610348	0	0	0	0
MONO-OLE	0	0	0	0	0	0.000461	0	0	0	0
TRI-LINOLEIC	0	0	0	450	450	0.18323	0	0	0	450
DI-LINOLEIC	0	0	0	0	0	0.584061	0	0	0	0
MONO-LINLEIC	0	0	0	0	0	0.000378	0	0	0	0
MET-LINOLEIC	0	0	0	0	0	405.0202	0	0	0	0

Appendix Table D2 The stream table of one rectifying

	1A	2A	3A	4A	5A	6A	RECYCLE MEOH	MEOH	NAOH	OIL
Temperature C	63.05124	63.0527	60	25.00764	60	105.6612	85.7926024	25	25	25
Pressure kPa	100	101.325	101.325	101.325	101.325	101.325	101.325	100	100	100
Vapor Frac	0	0	0	0	0	0	0	0	0	0
Mole Flow kmol/hr	10.48592	10.48592	10.48592	1.132865	1.132865	5.490108	6.12867634	6	0.300022	1.132865
Mass Flow kg/hr	338.3466	338.3466	338.3466	1000	1000	1004.148	196.344467	130	12	1000
Volume Flow cum/hr	0.432702	0.432703	0.430965	5.585033	5.619089	1.379723	0.28335648	0.242462	0.006341	5.585025
Mass Flow kg/hr										
TRIOLEIC	0	0	0	550	550	0.678995	0	0	0	550
METHANOL	326.3466	326.3466	326.3466	0	0	0	196.344467	130	0	0
NAOH	12	12	12	0	0	12	0	0	12	0
METHYL-OLEIC	0	0	0	0	0	505.0198	0	0	0	0
GLYCEROL	0	0	0	0	0	80.0484	0	0	0	0
WATER	0	0	0	0	0	0	0	0	0	0
DI-OLEIC	0	0	0	0	0	0.610338	0	0	0	0
MONO-OLE	0	0	0	0	0	0.000461	0	0	0	0
TRI-LINOLEIC	0	0	0	450	450	0.183221	0	0	0	450
DI-LINOLEIC	0	0	0	0	0	0.586053	0	0	0	0
MONO-LINLEIC	0	0	0	0	0	0.000378	0	0	0	0
MET-LINOLEIC	0	0	0	0	0	405.0202	0	0	0	0

Appendix Table D3 The stream table of two rectifying

	1A	2A	3A	4A	5A	6A	RECYCLE MEOH	MEOH	NAOH	OIL
Temperature C	62.55862	62.56058	60	25.00764	60	105.971	69.3143112	25	25	25
Pressure kPa	100	101.325	101.325	101.325	101.325	101.325	101.325	100	100	100
Vapor Frac	0	0	0	0	0	0	0	0	0	0
Mole Flow kmol/hr	11.0955	11.0955	11.0955	1.132865	1.132865	5.489538	6.7388291	6	0.300022	1.132865
Mass Flow kg/hr	314.7172	314.7172	314.7172	1000	1000	1141.9	172.730144	130	12	1000
Volume Flow cum/hr	11.12271	11.12271	11.11793	5.585033	5.619089	1.375648	11.942244	0.242462	0.006341	5.585025
Mass Flow kg/hr										
TRIOLEIC	0	0	0	550	550	0.123121	0	0	0	550
METHANOL	302.7172	302.7172	302.7172	0	0	21.13696	172.730144	130	0	0
NAOH	12	12	12	0	0	12	0	0	12	0
METHYL-OLEIC	0	0	0	0	0	552.2663	0	0	0	0
GLYCEROL	0	0	0	0	0	104.2738	0	0	0	0
WATER	0	0	0	0	0	0	0	0	0	0
DI-OLEIC	0	0	0	0	0	0.11931	0	0	0	0
MONO-OLE	0	0	0	0	0	0.000465	0	0	0	0
TRI-LINOLEIC	0	0	0	450	450	0.0281	0	0	0	450
DI-LINOLEIC	0	0	0	0	0	0.096372	0	0	0	0
MONO-LINLEIC	0	0	0	0	0	0.000381	0	0	0	0
MET-LINOLEIC	0	0	0	0	0	451.8555	0	0	0	0

Appendix Table D4 The stream table of three rectifying

	1A	2A	3A	4A	5A	6A	RECYCLE MEOH	MEOH	NAOH	OIL
Temperature C	62.56234	62.56429	60	25.00764	60	105.9631	69.3163446	25	25	25
Pressure kPa	100	101.325	101.325	101.325	101.325	101.325	101.325	100	100	100
Vapor Frac	0	0	0	0	0	0	0	0	0	0
Mole Flow kmol/hr	11.09527	11.09527	11.09527	1.132865	1.132865	5.4896	6.73853886	6	0.300022	1.132865
Mass Flow kg/hr	314.715	314.715	314.715	1000	1000	1141.872	172.724835	130	12	1000
Volume Flow cum/hr	11.12132	11.12133	11.11654	5.585033	5.619089	1.375607	11.9410567	0.242462	0.006341	5.585025
Mass Flow kg/hr										
TRIOLEIN	0	0	0	550	550	0.123069	0	0	0	550
METHANOL	302.715	302.715	302.715	0	0	0	172.724835	130	0	0
NAOH	12	12	12	0	0	12	0	0	12	0
MET-OLE	0	0	0	0	0	56.26645	0	0	0	0
GLYCEROL	0	0	0	0	0	80.27056	0	0	0	0
WATER	0	0	0	0	0	0	0	0	0	0
DI-OLEIN	0	0	0	0	0	0.119255	0	0	0	0
MONO-OLE	0	0	0	0	0	0.000465	0	0	0	0
TRI-LINO	0	0	0	450	450	0.028076	0	0	0	450
DI-LINO	0	0	0	0	0	0.09632	0	0	0	0
MONO-LIN	0	0	0	0	0	0.000381	0	0	0	0
MET-LINO	0	0	0	0	0	451.8244	0	0	0	0

Appendix Table D5 The stream table of four rectifying

	1A	2A	3A	4A	5A	6A	RECYCLE MEOH	MEOH	NAOH	OIL
Temperature C	62.55898	62.56093	60	25.00764	60	105.9854	69.316033	25	25	25
Pressure kPa	100	101.325	101.325	101.325	101.325	101.325	101.325	100	100	100
Vapor Frac	0	0	0	0	0	0	0	0	0	0
Mole Flow kmol/hr	11.09584	11.09584	11.09584	1.132865	1.132865	5.489652	6.73905371	4.057155	0.300022	1.132865
Mass Flow kg/hr	314.7233	314.7233	314.7233	1000	1000	1141.979	172.735494	130	12	1000
Volume Flow cum/hr	11.12398	11.12398	11.1192	5.585033	5.619089	1.375761	11.9427738	0.163951	0.006341	5.585025
Mass Flow kg/hr										
TRIOLEIN	0	0	0	550	550	0.12311	0	0	0	550
METHANOL	302.7233	302.7233	302.7233	0	0	21.12923	172.735494	130	0	0
NAOH	12	12	12	0	0	12	0	0	12	0
MET-OLE	0	0	0	0	0	552.2664	0	0	0	0
GLYCEROL	0	0	0	0	0	104.282	0	0	0	0
WATER	0	0	0	0	0	0	0	0	0	0
DI-OLEIN	0	0	0	0	0	0.119296	0	0	0	0
MONO-OLE	0	0	0	0	0	0.000465	0	0	0	0
TRI-LINO	0	0	0	450	450	0.028099	0	0	0	450
DI-LINO	0	0	0	0	0	0.096378	0	0	0	0
MONO-LIN	0	0	0	0	0	0.000381	0	0	0	0
MET-LINO	0	0	0	0	0	451.9341	0	0	0	0