

A

0.07	0.18	0.15	0.24
0.04	0.24	0.1	0.65
0.54	0.42	0.54	0.1
0.35	0.16	0.21	0.01

10.5
17.5
28
14

$X=A^1*B$

A¹

-2.81048	1.221774	-1.80242	6.060484
94.3629	-29.8306	-36.6855	41.1371
-66.0444	20.24597	30.52823	-36.2056
-24.5081	9.362903	8.959677	-9.99194

10.5
17.5
28
14

X

26.25
17.5
8.75
17.5

D1
B1
D2
B2

Componen	Mol in D1	Mol in B1	Mol In D	%
xylene	1.8375	3.15	4.9875	11.4
styrene	1.05	4.2	5.25	12
toluene	14.175	7.35	21.525	49.2
benzene	9.1875	2.8	11.9875	27.4
			43.75	100

Componen	Mol in D2	Mol in B2	Mol in B	%
xylene	1.3125	4.2	5.5125	21
styrene	0.875	11.375	12.25	46.66667
toluene	4.725	1.75	6.475	24.66667
benzene	1.8375	0.175	2.0125	7.666667
			26.25	100

MATERIAL BALANCE

USMAN GIFT AMIRA
CHEMICAL ENGINEERING
17/ENG01/031