7/14/71
K.E.B.

META

$$\alpha_{META-r} = \frac{(1886.9)(16558.9)}{(26248.3)(816.3)} = 1.465 \quad ?$$

$$\alpha_{2,4'-r} = \frac{16558.9}{26248.3} \times \frac{Y_1}{X_1} = .632 \frac{Y_1}{X_1}$$

$$= .632 \frac{9606.8}{5585.0} = 1.085$$

$$\alpha_{3,3'-r} = 0.632 \frac{\overset{2017.3}{\cancel{1900.7}}}{\underset{1715.0}{\cancel{3552.8}}} = \overset{.738}{\cancel{0.534}}$$

$$\alpha_{4,4'-r} = 0.632 \frac{\overset{1998.8}{\cancel{2121.4}}}{1820.1} = \overset{0.692}{\cancel{0.737}}$$

$$\alpha_{CB3-r} = 0.632 \frac{\overset{1619.1}{\cancel{499.1}}}{2045} = \cancel{1.54} \quad 0.50$$

$$\alpha_{CB4-r} = 0.632 \frac{2755.3}{6987.1} = .249$$

$$\alpha_{CB5-r} = 0.632 \frac{16.7}{5264.9} = 0.002$$

DSW 297086

STLCOPCB4066999

7/14/71
KEB

SAMPLE #1

COMP	LIQUID MOLE	LIQUID con	VAPOR MOLE	VAPOR con
META	816.3		1886.9	
PARA	16558.9		26248.3	
2,2'	954.7		1739.1	
2,4'	5585.0		9606.8	
3,3'	3552.8	1715.0	1900.7	2013.3
4,4'	1272.5	1820	2121.4	1998,8
CB3	2592.6	2045	499.1	1619.1
CB4	2671.1			
CB4	4316.0			
	6987.1		2755.3	
CB5	5264.9		16.7	
	43584.8		46774.3	

$$\alpha_{1-r} = \frac{Y_1 X_r}{Y_r X_1}$$

LET PARA BE THE KEY

2,2'

$$\alpha_{2,2'-r} = \frac{\frac{1739}{46774.3} \times \frac{16558.9}{43584.8}}{\frac{26248.3}{46774.7} \times \frac{954.7}{43584.8}} = \frac{(1739)(16558.9)}{(26248.3)(954.7)}$$

$$= 1.15$$

DSW 297087

SAMPLE #1

BASIS: 100 # SAMPLE

	COMP.	LIQUID WT	LIQUID MW	LIQUID MOLE	LIQUID MOLE %	VAPOR WT	VAPOR MW	VAPOR MOLE	VAPOR MOLE %
	BIPHEN	0.06	154.2			–	154.2		
	OTTHO	0.23	188.66			–	188.66		
	META	1.54	↓	816.3		3.56	↓	1886.9	
	PARA	37.29	↓	16558.9		49.57	↓	26298.3	
	2,6	–	223.1			–	223.1		
	2,2'	2.13	↓	954.7		3.88	↓	1739.1	
	2,4	1.23		551.4		3.62		1622.5	
	2,5					0.34		152.3	
	2,3'	1.90		851.7		3.63		1627.1	
	2,4'	9.33	↓	4181.9		13.62	↓	6104.9	
	CB3	0.21	257.5	81.6		0.31	257.5	120.3	
	2,5,2'	3.68	↓	1429.2		4.40	↓	1708.8	
	3,3'	0.49	223.1	204.2		0.16	223.1	71.6	
	CB3		257.5			0.29	257.5	112.6	
	3,4'	0.50	223.1	224.1		0.53	223.1	237.5	
	CB3	2.70	257.5	1048.4		0.48	257.5	186.3	
	4,4'		223.1			3.80	223.1	1583	
	2,3,2'	1.41	257.5	547.6			257.5		
	2,5,4'	3.85	↓	1495.1		2.91	↓	1130.1	
	CB4	0.12	292	410.9		0.07	292	23.9	
	3,4,2'	1.31	257.5	508.8		0.94	257.5	365.1	
	CB4	0.10	292	34.2		–	292		
						–			
		4.78		1636.9		2.83		969.2	
	2,3,4'	0.45	257.5	174.8		0.30	257.5	116.5	
	CB4	0.08	292	27.4		–	292		
		0.04		13.6		–			
		2.01		688.3		0.87		297.9	
		0.28		95.9		0.07		23.9	
		0.93		300		0.23		76.6	
	CB5		326.5				326.5		
	CB4	0.75	292	256.9		0.11	292	37.7	
	↓	–	↓			–	↓		
	3,4,4'	0.35	257.5	135.9		0.91	252.5	353.3	

DSW 297088

STLCOPCB4067001

		LIQUID				VAPOR			
	COMP	WT	MW	MOLE	MOLE%	WT	MW	MOLE	MOLE%
38	CB5	2.96	326.5	906.6					
39	CB4					2.57	292	880.2	
40	CB4	8.15	308	2716.6					
41	CB5								
42	↓								
43	CB5								
44						0.06	326.5	16.7	
45									
46									
47									
48									
49									
50									
51		17.19	326.5	5269.9					
52									
53									
54									
55									
56									
57									
58									
59									
60									

DSW 297089